

Green Open Space Implementation In Bandar Lampung City

ABSTRACT

The application of Green Open Space in Bandar Lampung is a challenge for the city government in implementing sustainable development. To be sustainable, the portion of Green Open Space must meet the provisions. The city government of Bandar Lampung is trying to fulfill the Green Open Space while carrying out development. Sustainable development will create a sustainable environment so that it will benefit all parties. This study will discuss the efforts of the city government in implementing various aspects of Green Open Space and also the actions taken to maintain ecological sustainability in the city of Bandar Lampung.

Keyword: *Green Open Space, Sustainable Development, Bandar Lampung*

INTRODUCTION

Green open space is a place that connects humans with the natural ecosystems that surround them. Green open space is very necessary to maintain the existing ecosystem in an area/region. In the journal of Indonesian fostered research associations, it is said that the results of several studies show that the function and role of this green open space is very important in the lives of the people of an area (Faisal, Rahmi, Soeriaatmadja, 2012). This is because the growth of the human population coupled with the need for housing, and other land needs will make green open land increasingly depleted and become a development area if there are no restrictions by related parties. And if the availability of green open space has reached the minimum threshold in its availability, then what will happen is environmental disturbance in the area which will cause flooding, air pollution, etc. caused by human intervention in an area.

In Indonesia, green open land has received attention from regulations regarding green open land in Indonesia. Among them is the Regulation of the Minister of Public Works Number 5 of 2008 concerning Guidelines for the Provision and Utilization of Green Open Space in Urban Areas, it is stated that green open space (RTH) is an elongated area/fund route or grouped, whose use is more open, where plants grow, both those that grow plants naturally and those that are intentionally planted. In addition, the Spatial Planning Law no. 26/2007 article 29 also stipulates that the existing green open space does not only function as ecology, but more than that, there are aesthetic, social, and cultural aspects (Imansari & Khadiyanta, 2015). In addition to maintaining ecology such as water catchment areas, city lungs, air control, light control, green open spaces can also function as public open land, therefore in its provision it must be accompanied by facilities that can be used and accessed by the public publicly free. In addition, green open space can also be a city layout that has aesthetic value in urban areas or other areas. And also in the regulation it is stated that there is a minimum percentage of 30% for green open land that must be fulfilled by cities in Indonesia in designing the development of their respective city layouts.

Indonesia has many cities throughout its territory and several cities have met the requirements as big cities, namely having a minimum population of 300,000 people according to Dioxides 1968. There are 3 out of 5 cities that are big cities in Indonesia including Bandung, DKI Jakarta, and Semarang. The 3 big cities should have an ideal green open space which is at least 30% of the land area due to the high population growth in the area.

In DKI Jakarta area which has an area of 661.5 km², in 2015, it is known through the data.jakarta.go.id page that there are 3,044 urban green open spaces in DKI Jakarta which consist of open green spaces, cemetery, waterfront waterways, green roads, public building parks, recreational parks, environmental parks, interactive parks, and city parks (Dinas Pertamanan dan Hutan Kota Jakarta, 2018). Meanwhile, to see the development of DKI Jakarta's green open spaces in the journal that examines the 3 cities, it also displays data that the area of DKI Jakarta's green open spaces covering land areas in 1982, 2000 and 2013 experienced a change, namely a decrease in the number of green open spaces

from 259,884 km² to 129,942 km² and in 2013 to only 110,450 km². Based on the data above, the area of green open space in DKI Jakarta in 1982, 2000 and 2013 can be concluded to have decreased by 22,755.3 ha. The reduction in green open space is due to the development of development land intended for residential and industrial purposes. If it is calculated based on the ideal area of green open space in an area, which is 30%, then the ideal area of green open space for DKI Jakarta is 198.45 km². This number is still far from the fact that the number of RTH DKI Jakarta in 2013 was only 110,450 km².

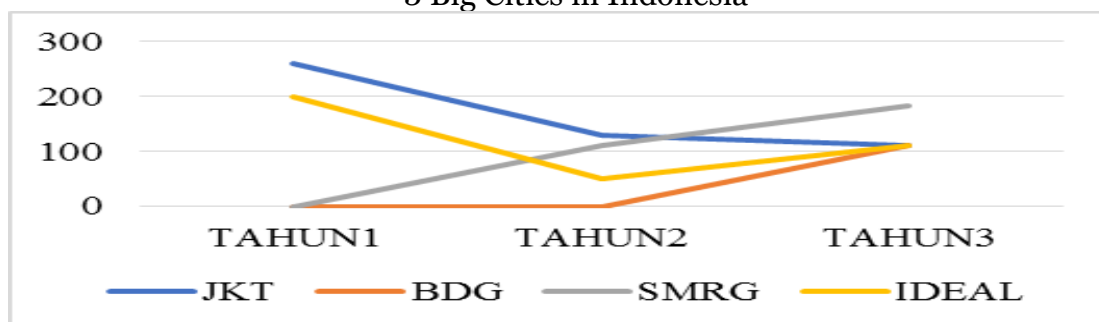
Next, Bandung is one of the big cities in Indonesia. Bandung has an area of 167.7 km² and has a population of 2.5 million people in 2020 (Disdukcapil Kota Bandung, 2020). In 2018 the city of Bandung recorded green open space which includes 6 sub-city areas namely Bojonegoro, Cibeunying, Tegalega, Karees, Ujung Berung, Gedebage experienced an increase until 2018 in each sub-district in each of the sub-regions of the city. The development of Bandung's green open space area is described in a journal with time horizons, namely in 1991, 2000 and 2013. In 1991 the area of Bandung green open space was 56,878.6 km² while in 2000 the area of Bandung green open space decreased to 38,476.7 km² and then continued to decline until in 2013 the area of Bandung's green open space was only 110,450 km². The amount of green open space in the city of Bandung in 2013 was only 20% of the area of the city of Bandung. Obviously, this is not the ideal area for an open green space as stated in the law, which is 30%. The decline in Bandung's green open space in the course of its journey has been converted to industrial city development, shopping areas such as Dago, etc. and also in addition, the parks that previously existed over time have disappeared or changed in function so that they are not included in the category of green open space parks and the city of Bandung, which is a tourism city, makes a lot of land used for the hospitality industry and settlements.

The next city is Semarang City which has an area of 373.8 km² and has a population of 1,572,107 million people in 2019 (BPS kota Semarang, 2019). In a study of green open space in big cities in Indonesia, it was explained that the city of Semarang experienced changes in the area of green open space which different from the other 2 cities. The area of RTH Semarang City has increased from 2000

and 2013. In 2000 the area of RTH Semarang City had an area of 112.113 km² and in 2013 the area of RTH Semarang City was 183.113 km². The increase that occurred in the span of 13 years of green open space in Semarang City was 71.003 km². The addition of Semarang's green open space has entered the ideal limit of the green open space that should exist in an area/city. with a minimum green open space that should exist in the city of Semarang, which is 112.14 km²/ 30% of the total area of the city of Semarang itself. In its 13-year journey, Semarang City has been able to present an ideal green open space for its own area. However, although Semarang City's green open space has reached the ideal limit, in the Indonesian Landscape journal it is stated that public green open space such as recreational green open space, sports and other public green open spaces need to be increased because they are still minimal in the city of Semarang itself. This is because the existing green open space is only in the form of mangrove forests and also fishponds (Bambang, Sulistyantara & Zain, 2014). Therefore, the government needs to feel that it is necessary to build more green open space that can be used for the public needs of its own people.

From the amount and development of green open space from the 3 big cities in Indonesia, a graphic can be made as follows:

GRAPHIC 1
Development of Green Open Space in
3 Big Cities in Indonesia



Information	
Year1 : Year 1990s	JKT : Jakarta
Year 2: Year 2000	BDG : Bandung
Year 3: Year 2013	SMRG : Semarang
Ideal: Ideal line (30% of green open space of land area)	

This graphic shows that 2 out of 3 big cities in Indonesia have not been able to achieve the ideal level of green open space in their own area except Semarang which is indicated by the gray line which increased in 2013 and crossed the ideal line indicated by the yellow color. In addition, the use of green open space for public open areas is still not optimal. Therefore, the government of each region should immediately build infrastructure that supports green open space and its use for public open space in order to create a better human ecosystem and environment.

By paying attention to the big cities above, Bandar Lampung as one of the big cities needs to be researched on the provision of green open spaces in order to meet the requirements set by the government. Therefore, research will be held to provide analysis and input to local governments later.

RESEARCH METHODS

The research design is a qualitative research approach that uses literature reviews to trace data and facts. Literature reviews help offer an analysis of the issue under investigation, analytical philosophical support, and information for research debate (Fraenkel, Wallen & Hyun, 2012). The information comes from a variety of publications, books, interviews and authoritative news outlets. The writers then conclude by elaborating and reinterpreting data which has been collected before.

RESULT AND DISCUSSION

Overview of Bandar Lampung City Spatial Planning

Lampung, which is an economic transit area between Java and Sumatra, makes it a strategic and profitable location for the growth and development of Bandar Lampung City as a center of trade, industry and tourism. From the

general description above, the Provincial Government of Bandar Lampung City has set its long-term spatial planning goal as a city of trade and services.

This decision-making is in accordance with the Bandar Lampung City Regulation No. 10 of 2011 concerning the 2011-2030 regional spatial plan in article 10 paragraph 1b which reads "increasing the accessibility of international and regional scale trade and service centers". The regional regulation is used as a guideline for the Bandar Lampung city government in developing the Bandar Lampung city spatial layout in accordance with the green open space.

Based on the Bappeda Bandar Lampung report, it is known that the number of hills, mountains and rivers in Bandar Lampung City remains at the same amount, namely:

TABLE 1.
THE NUMBER OF HILLS, MOUNTAINS AND RIVERS IN BANDAR LAMPUNG

No.	Name	Number
1	River	19
2	Mountain	14
3	Hill	19

Source: Bappeda "Bandar Lampung in 2017 figures"

The existing spatial planning objectives are formulated based on the long-term development vision and mission of Bandar Lampung City "Supporting the realization of a safe, comfortable, productive, and sustainable regional space based on Archipelago Insight and National Resilience".

In the 2005-2025 Long-Term Development Plan, the development vision of Bandar Lampung City is set, namely: "Bandar Lampung, the Trade and Service Center of Southern Sumatra 2025". With Bandar Lampung City as the National Activity Center (PKN) in the national spatial structure with one of its main functions as a regional trade and service center, and by linking the strategic issues of Bandar Lampung City development, the objectives of the Bandar Lampung City spatial planning are: Bandar Lampung City as a safe, comfortable and sustainable city of trade and services by taking into the preservation of the natural environment and biodiversity as well as the harmony of local, regional and national service functions.

The division of the city area is one of the regional space structure plans in which the plan consists of 5 other plans such as the city service center system plan, infrastructure system plan (transportation network system development plan, energy/ electricity network system development plan, telecommunication network system development plan, water resource network system development plan and urban infrastructure development plan).

The division of Bandar Lampung city area in Bandar Lampung City Regulation No. 10 of 2011 consists of 7 parts of the city area consisting of 13 sub-districts in Bandar Lampung. These divisions include (Bandar Lampung Major, 2011) :

1. BWK A covers The District of Tanjung Karang Pusat with an area of approximately 668 hectares.
2. BWK B covers Kedaton District and Rajabasa District with an area of approximately 2,390 hectares.
3. BWK C covers Sukarame District and Tanjung Senang District with an area of approximately 2,850 hectares
4. BWK D covers Tanjung Karang Timur district and Sukabumi district with an area of approximately 3,275 hectares
5. BWK E covers The District of Teluk Betung Selatan and Panjang District with an area of approximately 3,123 hectares.
6. BWK F covers Kemiling District and Tanjung Karang Barat District with an area of approximately 4,279 hectares.
7. BWK G covers North Betung Bay District and West Betung Bay District with an area of approximately 3,137 hectares.

Quoted from the report of Bappeda Kota Bandar Lampung in 2004 and from the results of interviews with the head of urban planning licensing of Bandar

Lampung and spatial planning of Bandar Lampung region, currently BWK Bandar Lampung City is divided into 8 areas with their respective functions, BWK in Bandar Lampung City is divided as follows:

TABLE 2.
THE BWK IN BANDAR LAMPUNG CITY LAMPUNG

No.	Region	Main Function	Others Function
1	Kedaton, Rajabasa and Tanjung Senang	Higher Education, Terminal Residential	Boarding, culture, local service center, small-scale agriculture
2	Sukarame	Large-scale housing, small-scale trade	Small Industrial Center, city development reserve, local service
3	Panjang	Ocean port center, trade, goods terminal, processing industry	Small industrial centers, conservation areas and protected forests
4	Sukabumi and Tanjung Karang Timur	Service trade	Housing, small industry, cultural heritage
5	Tanjung Karang	Trade/Service Center	Dual function housing, culture and garden
6	Tanjung Karang Barat	Trade/ Service	Housing area
7	Kemiling	Horticulture, settlement and tourism development	Large-scale housing, small industry, National Police School (SPN)
8	Teluk Betung Utara, Teluk Betung Barat, Teluk Betung Selatan	Central government, wholesale trade, beach tourism	Public services, housing, small industries and conservation areas

Source: Bappeda Kota Bandar Lampung (2004)

The division of the area is intended so that each region has its own role and function in the arrangement of existing city spaces so that the ongoing development of the city can be ideal. However, field data obtained from the interview results showed that there are still things that are not appropriate in the BWK. The discrepancy that occurs in the form of the construction of buildings that are not in accordance with the function of BWK in the region. For example,

in BWK Rajabasa area which is an educational area, terminal, and settlement but there is the construction of karaoke buildings. The discrepancy is mentioned as something that deviates but does not violate or violate the rules set. Therefore, the approach taken by the Bandar Lampung Government to overcome such things is to use a humanist approach in the form of discussions and so on.

Implementation of Policy in Eddy Sutrisno Era (2005-2010)

Based on the Instruction of the Minister of Home Affairs No.14 of 1988 on Guidelines for Structuring Green Open Spaces in Urban Areas, the definition of Open Space is the spaces in the city or wider area, both in the form of areas / regions and in the form of elongated areas / pathways where in their use is more open basically without buildings. In Green Open Space (RTH) its utilization is more of a green filling of plants or plants naturally or crop cultivation such as agricultural land, plantations, plantations and so on (Mendagri, 1988).

RTH in Bandar Lampung city also has various forms, where each of the RTH has its own function and benefits, as for various forms of RTH in the era of Eddy Sutrisno's such as:

1. Conservation Forests

RTH itself can be classified in several forms i.e., natural and non-natural. Conservation forests are one type of natural RTH. According to data from the Department of Agriculture, Livestock, and Plantations of Bandar Lampung City, in 2007, the area of conservation forest of Bandar Lampung city reached 350 ha spread across various regions such as: Panjang District, West Betung Bay, North Betung Bay, and Kemiling. Conservation forest itself consists of several other types of nature reserve forests (Nature Reserves and Wildlife Reserves), nature conservation forest areas (National Parks, Forest Parks and Nature Parks) and hunting parks. One of the conservation forest areas in Bandar Lampung City is Wan Abdurrachman Forest Park (Tahura WAR). The existence of TAHURA is in addition to useful for the environment also has functions such as: 1) as an area that is utilized by its natural potential for the collection of plants

and / or animals both natural and artificial, original or non-native types and natural tourism, (2) as a protection area for life support systems and (3) as preservation of plant and animal species and the uniqueness of nature (Tridarmayanti, 2010).

2. City Forest

Based on data from the Agriculture Office, in 2007 the urban forest located in the Bandar Lampung City area reached 86 ha spread across the districts of Kedaton, Sukarame, Tanjung Karang Barat, and Kemiling. The purpose of the establishment of this urban forest park is for the preservation and balance of the bandar lampung city ecosystem, but in fact some areas are not used as they should be regulated by the CITY RTRW bandar lampung, such as the example of urban forests located in Sukarame subdistrict that are less managed and tend to be diverted for widening of roads.

3. Community Forest and People's Forest

Community Forest (HKm) Bandar Lampung City has an area of 400 ha. Community forest itself has a definition as a forest that is utilized with the main goal of empowering local communities, which is so that local communities can be empowered and optimally utilize existing forest resources. The community is invited to even be required to plant trees as an effort to rehabilitate forests that have been damaged, then the community is allowed to take the forest products in accordance with the permit. Community Forest in Bandar Lampung is spread in Kemiling sub-district, North Betung Bay, West Betung Bay, and Tanjung Karang Barat.

According to Yeni Tridamaryanti in his research related to Green Open Space in Bandar Lampung City, based on the area of RTH that has been stipulated in Law no.26 of 2007 which is 30%, the area of Bandar Lampung City is still classified as sufficient availability of RTH, where in his research the results of RTH land use analysis are 61.40% or about 12,110 Ha of the total area. However, based on the area at the subdistrict level there are 2 sub-districts that do not meet RTH standards, namely Tanjung Karang Pusat and Kedaton Districts, while when viewed in terms of standard population there are 3 sub-districts that have not met

the standards, namely Kedaton, Tanjung Karang Pusat, and Teluk Betung Selatan.

During the leadership of Eddy Sutrisno, Bandar Lampung city received scathing criticism by the governor of Lampung at that time, Sjachroedin ZP where he criticized the city area space of Bandar Lampung which was seen as paying less attention to the principle of environmental sustainability. One of them is about dredging camang hills and turmeric hills which of course only benefit a handful of entrepreneurs and harm the community. The provision of RTH in the city has an important role for the survival of people's lives, but from the act of dredging the hill is certainly very contradictory to its existence. Dredging of these two hills is then used for the reclamation of Teluk Betung Yos Sudarso road beach. Then this exploited hill was converted into a housing. This makes the city that was previously quite beautiful with the existence of some green areas, becoming arid areas due to the exploitation of mountains or hills that are converted into residential land. This dredging is used for the program of structuring coastal areas or Waterfront City (city facing the Sea) which is a program offered by the government.

Policymaking is decided based on how state actors can take the most effective policies by considering their consequences and benefits (cost and benefit) to maximize the decision to achieve the interests. The reclamation program proposed by mayor was designed to increase Lampung tourism, especially the city of Bandar Lampung which he considers will provide good benefits for the city of Bandar Lampung, but in fact this reclamation program actually sacrifices the beauty of the RTH region in Bandar Lampung with the exploitation of mountains and hills in Bandar Lampung City.

Implementation of RTH Policy during the leadership of Herman HN (2011-2015)

During the reign of Mayor Herman HN, the City Government of Bandar Lampung, through the mayor, issued Bandar Lampung City Regional Regulation No. 10 of 2011 on Regional Spatial Plan (RTRW) year 2011-2030. The regulation

regulates the planning of more specific urban layouts, which in this case, sets a figure of at least 20% of the total area of Bandar Lampung City as Green Open Space (RTH). The regulation is contained in Article 48 of the Regulation, which stipulates the construction of city parks in several sub-districts in the Bandar Lampung City area, including Tanjung Karang Pusat District, Teluk Betung Utara District, Panjang District, and Teluk Betung Selatan District. It is also explained that the Government and the people of Bandar Lampung City must preserve urban forests, border lines, and green road lanes, as well as preserve green open spaces located in other places, such as street medians and cemeteries. As for some districts that must be preserved by the city forest is the District of Teluk Betung Barat, Panjang, Teluk Betung Utara, Tanjung Karang Timur, Tanjung Karang Barat, and Sukarame. The regulation was made in order to establish the Bandar Lampung Greening City Movement through RTH conservation activities, tree planting on community-owned land, green road lanes, public facilities and other places

Although clearly written in the Regulation on green land conservation efforts and efforts that support it, starting from 2012, Bandar Lampung city is threatened to lose a lot of its RTH. This is due to the massive efforts to transfer RTH land into residential areas or business areas. For example, the urban forest in Way Halim District was converted into office and shophouses in 2012. The transfer of the function is based on the issuance of HGB Number 44/HGB/BPN.18/2010 which entitles PT Karya Kita Bersama (HKKB), to transform The City Forest Park (THK) Way Halim, from its original function as Green Open Space (RTH) to offices and shophouses (Gusvita, 2012). The policy clearly violates The City Regulation of Bandar Lampung Number 10 of 2011, Law No. 26 of 2007, and Regulation of the Minister of Public Works No. 05 / PRT / M / 2008 concerning Guidelines for the Use of Green Open Space in Urban Areas. For this decision, Mayor Herman HN received a lot of criticism and strong criticism. The People's Coalition concerned about urban forest parks consisting of various elements of NGOs, academics, horticultural plant entrepreneurs, students, and environmental activists has expressed protest over the transfer of THK Way Halim's function.

In addition, the lack of land for settlements creates a new dilemma in the preservation of RTH in Bandar Lampung City. [12] (Hidayat, 2016) As a result, Bandar Lampung city includes a shortage of RTH land, which ideally, 20%-30% of the area is land allocated to RTH. In the period of his reign for almost a decade, Bandar Lampung city was always in deficit in terms of RTH land provision. In 2012, the area of RTH Bandar Lampung City was only about 2100 hectares from the total 19722 hectares of land available in Bandar Lampung. That means in 2012, RTH land available only 11% of the total land of Bandar Lampung City.

In this era the government have failed in implementing the RTH policy contained clearly in Bandar Lampung City Regulation No. 10 of 2011, as well as other regulations or laws related to the preservation and procurement of RTH in the city's RTRW. In 2020, RTH Bandar Lampung even dropped to only 8.92% of the total land of Bandar Lampung City, far from the ideal figure of 20% (Pranata, 2020) In fact, officially, the Bandar Lampung City Parliament has suggested to the Second Term Government of Herman HN to immediately add a green open area for the people of Bandar Lampung City which is considered to be very small and has not met the ideal number of RTH for an urban area (Sopandi, 2016). The issuance of excessive land transfer policies for office areas, shophouses and housing is allegedly the cause of governemnt failure to implement RTH policies.

The failure of government in implementing the RTH provision policy has a major impact on the failure of the objectives and intentions of the RTH policy in the regional regulation of Bandar Lampung City No. 10 of 2011, where one of the functions, intentions, and objectives is for the city to be greener and more beautiful and provide more oxygen as well as maintain the temperature of the land and area of the area. From a study conducted to see the increase in temperature and weather in the city of Bandar Lampung, attached a data that shows the difference in maximum temperature and average temperature of bandar lampung city in 2011 and 2015 experienced a significant change. In 2011 the maximum temperature of bandar lampung city surface reached 29,329 degrees Celsius and in 2015 the maximum temperature of bandar lampung city surface reached 44,059 degrees Celsius, while the average temperature of bandar

lampung city surface in 2011 reached 23,121 degrees Celsius and in 2015 soared to 31,812 degrees Celsius (Qamilah, et all, 2015).

One of the reasons why the reduced land for RTH is for infrastructure development and improving industrial areas. This can be seen from the reduction of land that was previously minimal. Ideal land for RTH development in an area as much as 20-30% of the total area but it turns out that in 2011 Bandar Lampung City only left 11% of its entire land available for the development and provision of RTH. This is due to the development of infrastructure and the benefits obtained from these lands that can increase the per capita income of bandar lampung city even to lampung province itself.

Reporting from the report of the Lampung Provincial Development Analysis Series issued by Bappenas in 2015, the development of regional infrastructure. Presented a data that lampung province became one of the provinces ranked 10th road density and pdrb per capita province in 2014. It is said that the existence of good infrastructure development will ensure efficiency, facilitate the movement of both goods and services, and increase the value of the increase of the economic sector (Bappenas, 2015). From this was born an assumption that the progress of Bandar Lampung City in its economic sector became one of the results of the lack of attention to the provision of RTH land. Because the development of bandar lampung infrastructure continues to be improved so that in the long term it will produce results, such as increasing regional economic growth and so on.

Land Change for Public Green Open Space in Bandar Lampung City

The form or embodiment of Green Open Space is quite ideal that should be available in urban areas because the city is a place or center of human activity. The high activity of a city or region causes the flow of transportation, industrial activities and other activities that cause adverse impacts on the environment so as to reduce the quality of the environment.

Bandar Lampung as the capital of Lampung province and the largest city in Lampung province as the center of government, economic center, education center and as the urban face of Lampung province has an area of 19,722 hectares with the contours of hills and coasts (BPS Bandar Lampung, 2015). From the total area, then the city of Bandar Lampung should have a Green Open Space with a total area of at least 5,916 ha consisting of Public RTH or government-owned land of at least 3,944 ha (20% of the area of Bandar Lampung city (Lailaa, 2020).



Fig. 1. 2015 City Green Open Space Map of Bandar Lampung

Source: RTRW map of Bandar Lampung city 2011-2030

Based on spatial data related to the Bandar Lampung City Spatial Plan in 2011-2030 the city of Bandar Lampung has a land area of 18,715.76 hectares with details of the division of Urban Space Bandar Lampung is as follows: (Bappeda Prov. Lampung, 2020)

TABLE 3.
List Of Space Patterns / Space Allocation In RTRW
Bandar Lampung City

N o.	Object Name	Spacious (Ha)	%
1	Beach BorderLine	250.0748	1.34
2	River Border	241.0287	1.29
3	Protected Forest	443.7510	2.37

4	Small industries and fisheries	48.3429	0.26
5	Minopolitan area	9.3141	0.05
6	Educational area	15.4777	0.08
7	Higher education area	260.1554	1.39
8	Rail-like area	61.0471	0.00
9	Terminal area	35.1773	0.19
10	Worship complex	5.2830	0.03
11	Fishing Port	9.3771	0.05
12	Port/terminal of its own interests	127.7585	0.68
13	Warehousing	61.6787	0.33
14	Development Reserves	1934.4940	10.34
15	Government Office	115.7993	0.62
16	Fishing Settlements	10.8295	0.06
17	Mining Area	176.8664	0.95
18	Non-Green Open Space	6.7247	0.04
19	Spring Border	0.3083	0.00
20	Bakung landfill	40.3657	0.22
21	Trade and Services	1413.1917	7.55
22	Green Open Space	344.2552	1.84
23	High density settlements	3999.5958	21.37
24	Medium density settlements	2129.9852	11.38
25	Water catchment area	4254.9420	22.73
26	Ind. Medium/Warehousing	532.3766	2.84
27	Nature Tourism	165.1742	0.88

28	Defense and Security	83.3607	0.45
29	Low density settlements	1938.4978	10.36
30	Seagrass Meadow, Mangrove, Mangrove etc.	0.5273	0.00
SUM		18.715.7609	100.00

Source: WALHI Lampung

From the table data above, it can be classified several patterns of space that can be "claimed" as green open space, including:

Table 4
LIST OF RTH Based On
Classification OF WALHI Lampung
Against RTRW Bandar Lampung City

No.	Object Name	Spacious (ha)	%
1	Beach BorderLine	250.0748	1.34
2	River Border	241.0287	1.29
3	Protected Forest	443.7510	2.37
4	Rail Border Area	61.0471	0.33
5	Water Border	0.3083	0.00
6	Green Open Space	344.2552	1.84
7	Nature Tourism	165.1742	0.88
8	Seagrass Meadow, Mangrove, Mangrove etc.	0.5273	0.00
Sum		1.506.1667	8.05

Source: WALHI Lampung

The total area of green open space that has been set in the Bandar Lampung City Regional Regulation number 10 of 2011 concerning the Regional Spatial Plan 2011-2030 covering an area of 344,256 it turns out that there are 102.43 hectares or equivalent to 29.79% of the green open space of Bandar Lampung city experiencing changes in allotment or transfer of land functions

either. The condition of the green open space of Bandar Lampung city which was 344,256 has switched functions and only 241.82 hectares remain due to land transfer. WALHI identified 5 green open spaces that experienced major changes in the following infographic:



The 5 Biggest of functional shift of RTH in
Bandar Lampung 2011-2020
Source: WALHI Lampung

From the results of the analysis that has been done, it is found that until now the Total Area of Green Space in Bandar Lampung City in the RTRW Regulation of Bandar Lampung City Number 10 of 2011 is only 1,506.17 hectares or equivalent to 8.05% of the total area of Bandar Lampung. Then, if added the remaining green open space with other land components, then the amount of Green Open Space of Bandar Lampung city remaining as a whole is an area of 1,743.05 hectares or equivalent to 9.31% of the total area of Bandar Lampung City, as for the details:

Table 5
Changes In Rth City Of Bandar Lampung

N o.	Object Name	Wide (Ha)	%	Change	Remnant	%
1	Beach Border Line	250.07	1.34	0.00	250.07	1.34
2	River Border	241.03	1.29	0.00	241.03	1.29
3	Protected Forest	443.75	2.37	0.00	443.75	2.37
4	Rail Commensurate Area	61.05	0.33	0.00	61.05	0.33
5	Water Border	0.31	0.00	0.00	0.31	0.00
6	Green Open Space	344.26	1.84	102.43	241.83	1.84
7	Nature Tourism	165.17	0.88	0.00	165.17	0.88
8	Seagrass Meadow, Mangrove, Mangrove etc.	0.53	0.00	0.00	0.53	0.00
9	Zoo	5.80	0.03	0.00	5.80	0.03
10	Farmland	278.40	1.49	0.00	278.40	1.49
11	SUTET	5.60	0.03	0.00	5.60	0.03
12	Street Media & Pedestrian	43.01	0.23	0.00	43.01	0.23
13	Green Line	6.50	0.03	0.00	6.50	0.03
	Total RTH Area	1845,48		102.43	1743.05	
	City Area of Bandar Lampung in RTRW	18715,78				
	%RTH	9,86		0.55	9.31	

Source: WALHI Lampung

CONCLUSION

Changes that occur in public green open space in Bandar Lampung City have an approach taken to see the factors causing changes in green open space use the public is using a digital analysis of changes in land use changes in the

public green open space of Bandar Lampung City. When viewed from the form of land use change, there are at least six forms of public green open space that occur in Bandar Lampung City, namely as a development reserve, settlements, people's plantations, temporary open land, built-up areas, and terminals in the form of land use change.

From the results of the analysis that has been carried out, it was found that until now the total area of green open space in the city of Bandar Lampung in the Regional Regulation on the RTRW of the city of Bandar Lampung Number 10 of 2011 is only 1,506.17 hectares or equivalent to 8.05% of the total area of the city of Bandar Lampung. Then, if this total is added to the rest of the existing green open space, then the total area is 1,743.05 hectares or equal to 9.31% of the total area of Bandar Lampung city.

It can be concluded that green space area in Bandar Lampung has reduced significantly. Therefore the government must adapt in the formulation of policy regarding the green space area. These finding needed for evaluation of efforts that taken by the city government to implement sustainable development in this area.

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