

THE IDENTIFICATION OF NON-GREEN OPEN SPACE IN URBAN AREA

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Abstract

The problem of non-green open space that occurs in urban areas (case study in Jenderal Sudirman Street) is that land reduced due to development, the struggle for the function of land for descent is parking and trade and the narrowing of the pedestrian road. To solve the problem, it is necessary to identify conditions related to the use of non-green open space in the area. The approach used is the Triangulation method based on 3 points of view (Community, Government and Standards). The analysis of this study consisted of an analysis of the presence of non-green open space locations, analysis of physical conditions, analysis of non-green open space functions based on their typologies and the impacts arising from the transfer of land functions. Based on the results of the analysis, it was found that the condition of non-green open space based on the type was inadequate because it caused negative impacts on road users, the function and benefits of its were mostly for economic activities, 40% of users were less comfortable using it, road narrowing, congestion, air pollution and visibility inadequate, and the conditions of the non-green open space are not in accordance with the standards set by the government.

Keywords: Non-Green Open Sace, Pedestrian, Street Vendor, Trotoar.

1. INTRODUCTION

The Jenderal Sudirman Street area is an area that is a landmark for the Pekanbaru City, this road is also the center and imaging for the Pekanbaru as the capital of Riau Province. Activities on Jenderal Sudirman Street are diverse, such as shopping centers (malls/plazas), offices (government/private institutions), traditional markets, trade services (hotels) and street vendors and many other activities, resulting in many pedestrians take from these various activities using non-green open space such as sidewalks, corridors and so on. If reviewed theoretically and normatively, conditions existing nowadays, functions and benefits of non-green open space in Jenderal Sudirman street area still do not applicable standards and provisions, uncomfortable space, unproductive and unsustainable space. As well as lack of attention, control and care. Facilities in this area are a big problem for road users, especially pedestrians.

Development of non-green open space in the urban areas of availability of public or semi-public land. Some issues of it that occurred in Jenderal Sudirman Street area include :

1. Land for open space is decreasing due to development.
2. The occurrence of the struggle for the function of the land of the sidewalk into parking lots and street vendors, resulting in inconvenience to the community, especially road users.
3. The narrowing of the road pedestrian due to the use of irregular non-green open space facilities.

From the description above, a study is needed that can identify the extent of the presence of non-green open spaces, especially on the General Sudirman Street in the city of Pekanbaru-Riau, in order to have a good technical, ecological and aesthetic suitability and characteristics of the problems affecting the function of non-green open space.

2. METHODOLOGY

The analytical approach used in this study is the triangulation approach, a method used based on three points of view:

1. Public opinion; this method is done through interview techniques asking for opinions to the community around the research location in the form of written or questionnaire questions
2. Government; the method used based on the results of interviews and based on the provisions set by the government,
3. The standard that has been set is the method of analysis of the state of the object which should follow a certain rule or guideline. The standard rules are the standards set by the government as a legal basis, in this case in the form of regulations or standards for non-green open space.

The observations were carried out from the initial research activities to establish the boundaries of the research study area and observe was on the field. This observation is done to find out how the patterns of movement and affect the movement of the person. The survey process is carried out for three days, Monday, Wednesday and Sunday starting from morning at 09.00 a.m until evening at 18.00 p.m.

Table 1. Research Variable

No	Variable	Indikator
1.	Identification of non-green open space	<ul style="list-style-type: none"> - Existing condition of non-green open space based on typology - The function of non-green open space based on typology - Level of convenience from non-green open space facilities - Impact of struggle and changes in land functions - The role of government and community expectations
2	Problems	<ul style="list-style-type: none"> - Road narrowing - Traffic congestion - Air pollution - Damage the scenery

Source: Result of Analysis, 2015

The technique for sampling is used by accidental sampling technique (sampling method by choosing who happens to be or is encountered). This close the possibility for road users both local communities and other people who visit the region. Based on the observations to determine the population size that will pass through the facility in the form of sidewalks and corridors of General Sudirman Street in 100 samples. The area of research is Pelita Pantai - Bundaran Titik 0 ($\pm 1,5$ km).



Source : Result of Analysis, 2015

Figure 1. Research Area

3. RESULT AND DISCUSSION

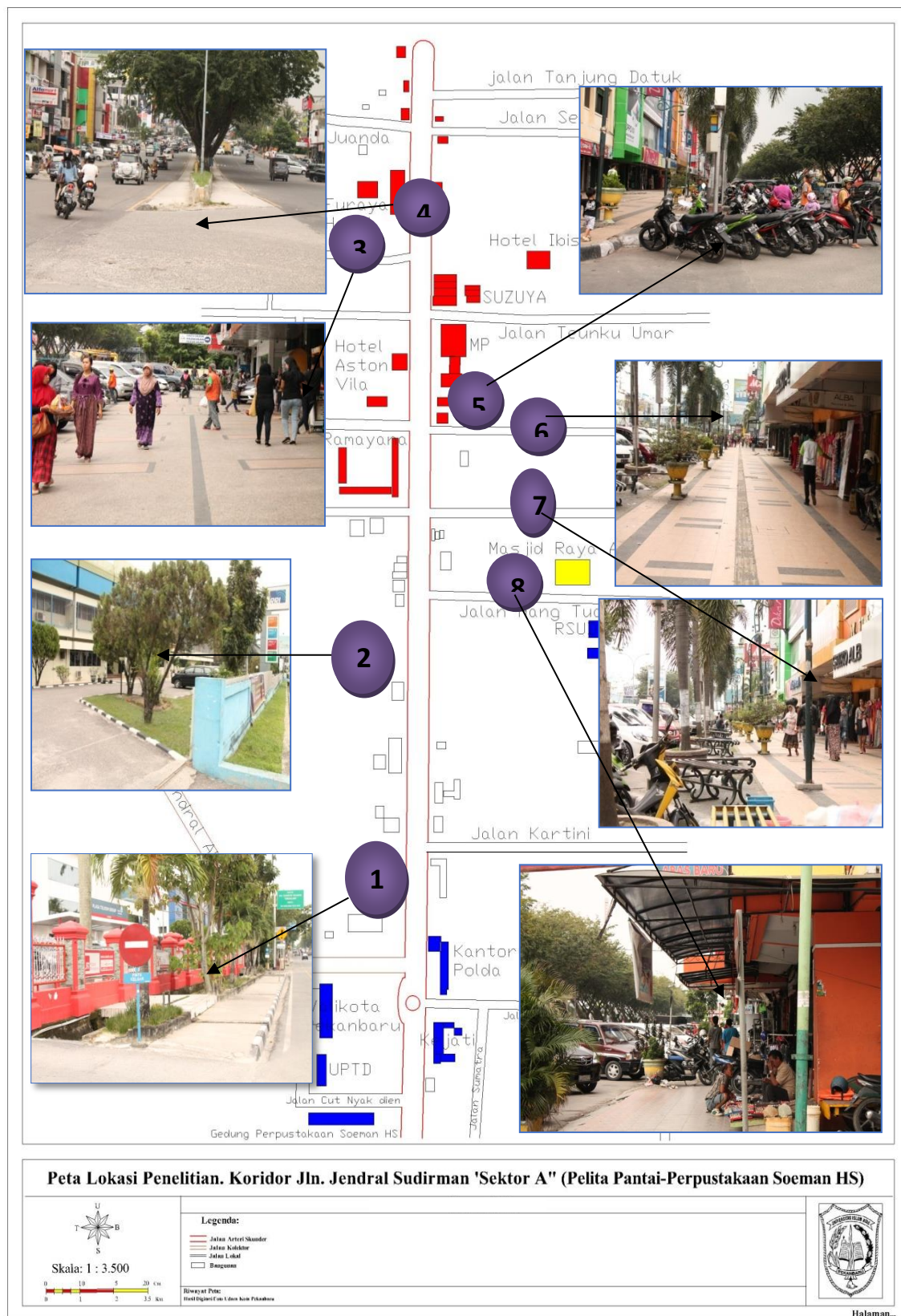
Non-Green Open Space is an open space in a part of an urban area that is not included in the green space category, in the form of hardened land or in the form of a water body that is not physically shaped as a building and is not dominantly planted or porous. Based on Law 26/2007 it is mandated that the provision of green open space in a urban area is 30%, where a minimum of 20% must be provided by the Government land and 10% is provided by the private or community. This allocation consideration is based on ecological needs, in accordance with the world convention agreed in Rio de Janeiro, (Directorate General of Spatial Planning, 2008) Especially for non-green open space, there are no specific rules governing the maximum provision. In the context of provision, there are several rules or standards that provide functional direction for non-green open space area requirements for each activity function. So that it can be concluded that the direction of provision of that does not set the maximum area on a urban area scale, but leads to the need for area for each function activity

4.1. Physical Condition Existing of Non-Green Open Space in General Sudirman Street

Based on research, physical condition existing are:

1. Sidewalks; is part of road with the intention of dividing an orderly path between the vehicle line and the pedestrian path. The condition of the existing pavement in the current study area can be seen from the results of the survey, each of them is not well organized, the road furniture and still very poorly maintained and there is misuse of land function (crowded parking) at several points along the corridor of General Sudirman

- Street. Lack of structuring and pedestrian care and the struggle for land is one of the causes of this pedestrian inconvenience.
2. Parking Lot; parking is a form of non-green open space as a court with the main function of placing a motor vehicle such as a car or motorbike. In accordance with the definition, the main function of parking basically can be categorized as economic activities, namely activities that have or provide certain economic value . In most building functions, parking areas are generally only used during the day (working hours), while at night parking areas in most building functions tend to be empty (passive). Therefore, at certain times (incidental), parking areas are basically utilized by street vendors as economic activities.
 3. Corridors; Corridor is a form of non-green open space as a pathway with the main function as a pedestrian facility which is not a sidewalk (the pedestrian path that is on the side of the road). In accordance with the definition, the main function of the corridor is its accessibility. socio-cultural functions, namely activities to support human movement from one building function to another building function. But basically the corridors in this area are always utilized by street vendors and as a parking lot, of course on the side it is disturbing for users walking can also damage the scenery and comfortly.
 4. Buffers in the form of Median Roads; The condition of the road divider (Buffer) in the form of a Median Road in General Sudirman Street is quite adequate, because there are trees, fences, flower pots along the median of the Sudirman Street which can provide beauty, comfort and benefits for the community according to its function



Source : Result of Analysis, 2015

Figure 2. The Existing Condition of Non-Green Open Space

4.3. Public Opinion

1. Existing condition based on non-green open space typology.

According to respondents such as pedestrians, street vendors or shop owners, it is argued that the condition of the sidewalk pedestrian path is not good (45%) because it is not well organized and not maintained at some points along the General Sudirman Street corridor. Based on the results of direct observation, the size or width of the sidewalks that exist along the street segment are currently varied the standard of 2-3 meters. This means that it is not in accordance with the results of Kep. Minister of Transportation. No KM. 65/1993 the width of the sidewalk should be at least 4 meter for urban areas, but for office and shopping areas already meet the existing standards at 2-3 meters.

According to respondents, the condition of parking lots is not comfortable with a percentage of 43% that parking lots along the street are still not comfortable because they are not well organized and are still so chaotic that they disturb road users, especially pedestrians. The condition of the General Sudirman Street corridor is only 21%, it is comfortable and as many as 38% of respondents stated that the corridor condition is uncomfortable, where the land grabs are being used by street vendors selling in the area. The current road limiting conditions in General Sudirman Street area are still good in terms of meeting standards with a percentage of 49% and only 5% are not good.

2. The function of non-green open space based on typology.

Berdasarkan hasil analisa fungsi dan manfaat Tipologi RTNH masih ada yang belum sesuai dengan fungsi dan manfaat yang sebenarnya.

Tabel 2. The Function of Non-Green Open Space on Typology

No	Typology	Function	Condition	Analysis
1	Trotoar	Pedestrian	Street Vendors, Parking	Unsuitable
2	Parking Lot	Vehicle	Parking	Suitable
3	Coridor	Pedestrian	Street Vendors	Unsuitable
4	Median	Border	Border	Suitable

Source: Result of Analysis, 2015

3. Level of convenience

From the results of observations and questionnaires on the General Sudirman Street section regarding the comfort level of facility users, there were still some problems that resulted in inconvenience to road users (74%).

4. Impact of changes in land use function between street vendors and parking

Based on the results of observations and questionnaires in various research areas, the community argued that the pedestrian pathway in the Sudirman Street area was often taken over by street vendors and parking, so the road became narrow and could damage the eyes. The impacts caused are road narrowing (25%), congestion (25%), air pollution (25%) and damaging the aesthetics of the city (25%).

4.2. The Function of Government in Pekanbaru City

Based on research obtained :

1. The role of government in providing non-green open space.

Based on interviews with experts from the Pekanbaru City Spatial and Building Agency, the role of the Pekanbaru City Government in providing the needs of non-green open space in the General Sudirman Street area is currently in line with the needs of the

community including: provision of supporting facilities such as provision of plaza (as a social function / place sitting road users), road corridors, parking lots, sidewalks and road medians. The relevant agencies that are involved in the provision and control are among others: the Public Works Agency, the Sanitation and Parks Office, the Regional Development Planning Agency, and the Transportation Agency. The Government's efforts in providing it in the General Sudirman Street area now meet the applicable standards. From the results of research, the awareness of the government to provide non-green open space facilities, especially in the area of General Sudirman Street, is almost fulfilled with a percentage of 60% and around 40% has not been fulfilled, it's just that the maintenance and discipline must be increased, so that no more problems or problems occur. due to the struggle for land done by street vendors and parking.

2. The role of government in handling problems of non-green open space.

The role of the government in overcoming the problem has been in collaboration with related parties including the Transportation Agency, the Civil Service Police Unit and the Police to curb the General Sudirman Street area so that the city looks beautiful and the facilities used are in accordance with its functions, especially non-green open space facilities. The steps taken are; order against street vendors who are not obedient to Regional Regulations, control of parking that is not appropriate in its place, provide signs or traffic signs and so forth. From the results of the study that the government's awareness to deal with the problem of facilities, especially in the area of Sudirman street, has not been fulfilled with a percentage of 70% stating that it has not been fulfilled and about 30% stating that it is fulfilled is only control and care that needs attention, for example controlling the route feet between parking lots and trade areas, maintenance of pedestrian paths in the form of sidewalks and corridors.

4.3. Non-Green Open Space Condition Based on Standard dan Anysis

The following table 3 describes the conditions of non-green open space on General Sudirman Street compared to the regulations that apply from the Department of Public Works :

Table 3. Tcondition of Non-Green Open Space in General Sudirman Street
 Based on Public Works Ministry Regulation No.12/PRT/M/2009

No	Facilities	Standard	Existing Condition	Analysis
1	Sidewalk	Sidewalk width: - Office: 3 meters - Urban: 4 meters - Bus Terminal/ Stop : 2 meters	Sidewalk Width: - Office: 2 meters - Urban 3 meters - Bus Terminal / Stop: 2 meters	Based on the standards and conditions at this time, there needs to be a review of the standard width of the sidewalk in this research area by the relevant agencies for the smoothness and beauty of a city, especially in General Sudirman Street (Unsuitable) but the Terminal/Bus is in accordance with the conditions there is.

2	Parking Area	Parking area: - 30,000 m ² area (or 3% of the area served), located in the city center	Parking area: The parking area in the General Sudirman Street area cannot currently be determined because the extent of the parking lot depends on the level of crowd / visitors who want to do their daily activities	Due to the condition of this area in general as a city center and economic activity, the parking area at this time cannot be determined by existing standards, but it can be known that the level of visitors is likely to increase, the wider the parking area used, otherwise it is quiet then the condition of the parking lot will look spacious, this happens in the early hours and on holidays.
3	Corridor	Area of Corridor: Corridors on a large city scale can be in the form of circulation paths between buildings or between one function and other functions, with the area and placement adjusted to certain sub-district residential environment systems	The condition of the corridors in this area is good enough, only the control that must be done to the street vendors so that the road users are not disturbed, the width of the corridor is 3-4 meters.	From the existing conditions, it can be concluded that the current condition of the corridors in General Sudirman Street area is adequate, but it is necessary to control the street vendors by the relevant agencies so as not to disturb the road users and to provide the comfort and beauty of the city. for the width size is in accordance with current environmental conditions.
4	Median	Limits between urban areas, with area and placement. Tailored to certain environmental systems	The current Median condition of the road is quite good and its beauty is maintained, the size varies between 2 - 4 meters	Based on the results of observations and analysis that the condition of the General Sudirman Street median is currently very good

and in accordance with its function, its size is in accordance with the existing environmental conditions.

Source: Result of Analysis, 2015

4. CONCLUSION

Based on the research concluded the following :

1. The condition of non-green open space based on the type is not sufficient because it has a negative impact on road users
2. The functions and benefits of non-green open space based on typology are mostly used for economic activities such as trade zones and parking lots
3. The convenience level of non-green open space facility users by 40% of users states that it is less convenient because pedestrian land has shifted into a trading area and irregular parking lots
4. The impact resulting from changes in the function of pedestrian land is road narrowing, congestion, air pollution and poor visibility.
5. The condition of non-green open space based on the standards that have been set is not in accordance with the existing conditions

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