The concept of street vendors arrangement in the waterfront

E P Akbar¹*, Y Ratih² and C Destria²

¹ Department D4 Building Architecture, Politeknik Negeri Pontianak, Indonesia
² Department D4 Urban Design, Politeknik Negeri Pontianak, Indonesia

*Archi7estar@gmail.com

Abstract. The Waterfront Seng Hie area the initial conditions of the design planning did not provide a special area for the street vendors. So that this condition caused the adjustment of the behavior of trading the Street Vendors with the conditions of public space settings that exist to sell at the waterfront Seng Hie. The Street Vendors uses public areas such as open-air plazas, park benches, stairs, and railing as well as waterfront guardrails to sell. For that, it is necessary a concept of the arrangement of the Street Vendors selling area that can facilitate the economic needs that are currently formed, without damaging the existing waterfront as public space and open space. The design concept will be analyzed by looking at the pattern of trading behavior that has been created and the settings variables of the public space there are both fixed elements, semi-fixed, and then non-fixed. Data analysis will be discussed qualitatively between behavioral variables with a physical variable setting concerning the variables to produce the proper concept of New Arrangement of Street Vendors in the Waterfront Seng Hie area. Namely with Regional Zoning Concept, Circulation Settings, Visual Quality Improvement, and Relocation.

1. Introduction

Based on Pontianak City Regional Regulation No. 3/2013 [1] One of the strategies for developing tourism, recreation, and natural protection activities in the suburbs and bodies of the Kapuas River is with the concept of waterfront city. Waterfront Seng Hie Pontianak City is one of the new waterfronts that appears as a public open space on the edge that exists right in the heart of Pontianak City, has become a new magnet of informal activities, it seems that the plan does not consider the possibility of the emergence of informal activities such as Street Vendors abbreviated to Street Vendors. Nowadays the waterfront area of Seng Hie Pontianak city becomes crowded occupied by street vendors who sporadically appear.

Surely the existence of these Street Vendors became dualism on the one hand became a new source of livelihood of the surrounding community, and on the other hand, created a new space that was not planned and impressed as much as it seemed. Street Vendors adapts its space by utilizing the physical settings that exist, namely park benches, guardrails, open space/open plaza areas that are used as selling areas. For that reason, a direction of the concept of structuring the Street Vendors in Pontianak City Waterfront so that the previously planned function as waterfront can go hand in hand with the existence of the Street Vendors without disturbing each other. This research aims to provide a recommendation for zoning of Street Vendors in Seng Hie waterfront Pontianak city and provide a design direction setting the appropriate Street Vendors space applied in the waterfront Seng Hie Pontianak City so that the existence of the Street Vendors will be a part that blends with the waterfront mutually beneficial and
does not interfere with the activities and functions of one another, in other words, does not occur conflict in the use of space.

According to the Indonesian Minister of Home Affairs Regulation No. 41/2012 on Guidelines for Structuring and Empowerment of Street Vendors [2] about the types of business places of the Street Vendors are (see table 1):

**Table 1.** Types of business venues street vendors.

| Types of Places of Business Not moving | Types of mobile businesses |
|---------------------------------------|----------------------------|
| a. Gelaran                            | a. Non-motorized           |
| b. Lesehan                            | b. Motorized               |
| c. Tent                               |                            |
| d. Selter                             |                            |

2. **Location overview**

Waterfront Seng Hie Pontianak City, located in Benua Melayu Laut village, South Pontianak sub-district, located in the middle of Pontianak City has a length of about 800 m shown in the following image (figure 1 in table 2).

**Table 2.** Waterfront location.

![Waterfront Seng Hie](image)

**Figure 1.** Pontianak City Waterfront Location, Source: Survey, 2019

3. **Waterfront Seng Hie**

Waterfront means the waterfront area, part of the city bordering the water, the port area of Echlos, and Shadily [3]. Seng Hie waterfront location in the city center can be categorized as Urban Waterfront, an urban environment located on the edge or near the water area, Wrenn [3].

Waterfront Seng Hie has a unique location in the middle of Pontianak City, this waterfront is also close to Seng Hie port. Waterfront Senghie can also be said to be an open space that according to Trancik [4] is said that the outdoor space is not massive (or not a building) into a further void form in Permendagri Number 1 the year 2007 [5], mention that open space, spaces within the city or a wider area either in the form of an area or/area or in the form of an elongated area/path wherein its use it is open which is basically without buildings. In this case regarding the existence of open space in Waterfront Seng Hie, will be as magnet informal activities such as Street Vendors and this is certainly predictable.

Informal activities such as Street Vendors fall into the category of "Supporting Activities" in terms of city design [6] so that its existence certainly needs attention and it is necessary to consider the
possibility of its presence in any open space designed to be accommodated so as not to clash with the main activities planned.

Setting a good space is the appropriate setting between the planning and the application, according to Hall, 1966 [7] in the pattern of the arrangement of the space consists of:

1) Fixed-feature space, Elements that are difficult to change, Example: Walls, Floors, Windows.
2) Semi fix-feature space, elements that are easy to change or are not fixed in nature. Examples of furniture such as tables and chairs.

There are three main aspects to be considered in waterfront planning [8]: 1) Architectural Aspects, 2) Technical Aspects, and 3) Socio-Cultural Aspects. This Research will focus on the architectural aspect.

4. Research methods
Exploration of field data collection conducted by behavior mapping is one of the behavioral observation methods developed by Ittelson, 1970 [9] This method is used to see how the spread of Street vendors in occupying the open space setting in Waterfront Seng Hie Pontianak City and see part of the physical setting of what waterfront is used by the Street Vendors in occupying open space. The analysis was done qualitatively by setting between the existing variable setting of waterfront space that has been occupied by the Street Vendors with setting variable conditions that can be applied in the existing setting.

The research phase starts from field observation using behavior mapping, to make it easier to observe the area divided into three main zones, then to identify each zone against the use of space settings by the Street Vendors, then followed by data grouping and analysis of design directives that may be developed with some practical best reference, the last is the conclusion contains recommendations on the concept of structuring the Street Vendors in Waterfront Seng Hie Pontianak City.

5. Results and discussions

5.1. Spread of street vendors at Waterfront Seng Hie
Based on observations conducted in the field, Seng Hie waterfront has a linear regional character, the linear model will potentially increase movement throughout the area [10] here is a map of the distribution of the Street Vendors based on the type of place of business can be seen in the following image (figure 2-4 in table 3).

| Picture | Data |
|---------|------|
| ![Image](image_url) | In segment A, the distribution of Street Vendors is dominated by the category of title, such as the title of child toy rental and the title of snack or snack and light drink, the existing area used is Fix: park bench, entrance gate, plaza, waterfront fence. |

| Figure 2. Distribution of Street Vendors in Segment A, Source : Survey, 2019 |
| Semi Fix: make benches and tables as an area to selling |
This part of segment B looks to be dominated by the tent category (using benches and tables for visitors to sit and eat). The existing area in use are Fix variable: waterfront fence, making hardening base area to selling

Semi fixed variable: make benches and tables as an area to selling.

This part of segment C looks similar to Segment B but less Street Vendors, dominated by the tent category (using benches and tables for visitors to sit and eat). The existing area in used are Fix variable: waterfront fence, making hardening base area to selling

Semi fixed variable: make benches and tables as an area to selling close to the riverside.

5.2. Street vendors type grouping

Based on the observations in the field, the Street Vendors group in the Waterfront Seng Hie area is divided into several groups, namely (see table 4):

Table 4. Analysis of street vendors at senghie waterfront location.

| No. | Types of Business Venues | Sample | Physical Setting Identification | Analysis | Percentage |
|-----|--------------------------|--------|---------------------------------|----------|------------|
|     | STREET VENDORS           |        |                                 |          |            |

Not Moving

Gelaran

- Toy Rental in Waterfront Seng Hie

Fix: -

Utilizing Park Benches

Semi Fix: -

Street Vendors Gelaran Toy uses park benches to wait while renting out toys so that space/park bench that should be used to sit visitors can not be utilized according to its function

15.74%

A food vendor's title along the waterfront fence

Fix: -

Utilizing Railing Fence stairs to sell

Semi Fix: -

Street Vendors Held snacks and drinks to utilize the outside of the fence to sell and make the fenced area as a place of sales signage, this condition is recommended to be regulated so as not to interfere with the circulation of waterfront visitors, Street Vendors brings up a new setting in the form of adding a place to sell same as waterfront height level

31.48%
Table 4. Cont.

| Location      | Type               | Fix: Utilizing Park Benches for trade titles | Semi Fix: Fixate use snacks and drinks used as markers/territory selling | The beverage sales hall utilizes several park bench areas to trade so that areas that function as seating cannot be utilized by visitors, this model needs to get appropriate location structuring directions. |
|---------------|--------------------|---------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lesehan       | None               | Fix: -                                       | Semi Fix: Fixate use snacks and drinks used as markers/territory selling       | Street Vendors with the character of tents that provide benches and dining tables, tends to take up space attached to the land side of the waterfront to sell and leaves a physical footprint of the place to sell (carts, benches, and tables), also, Street Vendors adds a physical setting of floor mats to sell which results in covering the river area, this condition is not recommended and needs to be rearranged. |
| Tent          | Street Vendors Tent on the side of the waterfront fence | Fix: -                                       | Semi Fix: Fixate use snacks and drinks used as markers/territory selling       | Street Vendors with the character of tents that provide benches and dining tables, tends to take up space attached to the land side of the waterfront to sell and leaves a physical footprint of the place to sell (carts, benches, and tables), also, Street Vendors adds a physical setting of floor mats to sell which results in covering the river area, this condition is not recommended and needs to be rearranged. |
| Shelter       | None               | Fix: -                                       | Semi Fix: Fixate use snacks and drinks used as markers/territory selling       | Street Vendors with the character of tents that provide benches and dining tables, tends to take up space attached to the land side of the waterfront to sell and leaves a physical footprint of the place to sell (carts, benches, and tables), also, Street Vendors adds a physical setting of floor mats to sell which results in covering the river area, this condition is not recommended and needs to be rearranged. |
| Moving        | Non-Motorized      | Fix: Utilizing Park Benches                  | Semi Fix: Fixate use snacks and drinks used as markers/territory selling       | Street Vendors move non-motorized that sells light meals using trolleys, at the waterfront park seating area, preferably provided a special place that does not interfere with the visitor's area to sit. |
|               | Light Food Vendors on garden benches using Shopping trolleys | Fix: -                                       | Semi Fix: Fixate use snacks and drinks used as markers/territory selling       | Street Vendors move non-motorized that sells light meals using trolleys, at the waterfront park seating area, preferably provided a special place that does not interfere with the visitor's area to sit. |
|               | Street Vendors eats chips, beans/wheelbarrow at the entrance | Fix: -                                       | Semi Fix: Fixate use snacks and drinks used as markers/territory selling       | Street Vendors move non-motorized that sells light meals using trolleys, at the waterfront park seating area, preferably provided a special place that does not interfere with the visitor's area to sit. |
|               | Motorized          | Fix: Make use of the staircase area in front of the waterfront gate | Semi Fix: Fixate use snacks and drinks used as markers/territory selling       | Moving Street Vendors which is generally occupied by Street Vendors with a wheelbarrow (Boiled beans, Chips) occupying the main entrance area of the waterfront is not recommended and needs to be placed specifically to selling. |
|               | Street Vendors using Sampan on Kapuas River               | Fix: -                                       | Semi Fix: Fixate use snacks and drinks used as markers/territory selling       | Moving Street Vendors which is generally occupied by Street Vendors with a wheelbarrow (Boiled beans, Chips) occupying the main entrance area of the waterfront is not recommended and needs to be placed specifically to selling. |

Street Vendors that use Sampan at this location are not in Lagi number there are only 2, for this condition is visually not recommended because it will block the view to the waterfront. For this type, there has been a location, especially which is indeed for Street Vendors with sampan that is in Kapuas square.
Table 4. Cont.

| Fix: Utilizing Relling Fence stairs to sell | Semi Fix: Using wooden planks | Street Vendors that utilizes the reeling of waterfront stairs in the entrance area of Gg Irian is not recommended, the function of reeling the stairs becomes incompatible with the provision |
|---------------------------------------------|---------------------------------|----------------------------------------------------------------------------------|

Source: Survey, 2019.

From the above data, it can be seen that the most occupied Street Vendors waterfront Seng Hie Pontianak city is Street Vendors with tent character which is 41.67 % (45 Street Vendors), then Street Vendors snack and soft drinks 31.48 % (34 Street Vendors), toy rental Street Vendors 15.74 % (17 Street Vendors), and Street Vendors moving 11.11 % (12 Street Vendors). So with this condition, the Street Vendors with the character of the tent needs to get special attention cause a lot also quite eats a place around the Waterfront because it brings up a new physical set (fix) in the form of a hardening space, and non-fix such as tables and chairs where to eat and place to sell. However, for the gelaran category, it will be dominated by STREET VENDORS Gelaran (Street Vendors snack & Beverage and STREET VENDORS Rental toys) which is 47.22 % (51 Street Vendors).

5.3. Street vendors setup concept
The concept of Street Vendors arrangement will be targeted at the existing condition of the waterfront setting, here is the Concept Model offered for Street Vendors set up in Waterfront Seng Hie Pontianak (see table 5 and figure 5-17):

Table 5. Concept direction.

| Concept | Analysis | Model |
|---------|----------|-------|
| **Zoning**, grouping the Street Vendors based on the type of business is moving and not moving, and organizing the area is attempted to utilize the areas around the waterfront that do not interfere with the visitor's activities | **Figure 5. Zone A Analysis.** Source: Survey, 2019 | **Figure 8. Zone A Recommendations.** |
| **Figure 6. Zone B Analysis.** Source: Survey, 2019 | **Figure 9. Zone B Recommendations.** | |
| **Figure 7. Zone C Analysis.** Source: Survey, 2019 | **Figure 10. Zone C Recommendations.** | |
Table 5. Cont.

| Visual Area, visually the quality of waterfront space remains maintained by not presenting Street Vendors on the side of the river which can reduce the visual beauty of visitors who want to enjoy Kapuas river | The Street Vendors that are on the park bench and attached to the waterfront fence on the land side is recommended to be rearranged by utilizing the space on the body of water with a 1.5 m cantilevered model, so as not to cover the river, and the setting that has been formed by the Street Vendors can be dismantled and neatly. This Recommended Model 1 is in place for Street Vendors food vendors snacks, drinks, and toy rentals. |

Circulation, circulation will be directed more clearly, namely the affirmation of access visitors come and visitors go home | The 2nd recommendation model by utilizing the living room of the area is relatively not passed by waterfront visitors, so the condition of the Street Vendors that currently takes the waterfront side space / sticking to the fence is not recommended because it interferes with the circulation of visitors view towards the river. The central area is recommended for food vendors, snacks, drinks, and toy rentals. |
Table 5. Cont.

| Relocation, relocation is possible to move the Street Vendors selling over the river and cover the body of the river and Street Vendors located in the area that damages the visual area |
|---|
| The 3rd recommendation model is to place moving Street Vendors in a special area so that it does not interfere visually because it has taken up space around the waterfront entrance gate. |

![Figure 16. Recommendation Model 03. (zone A)](image1)

![Figure 17. Recommendation Model 04 (Zone B).](image2)

6. Conclusions and suggestions

Some of the conclusions obtained from the results of this study are in the form of a direction of the design of waterfront development in Pontianak City consisting of the concept: 1) Zoning Arrangement of Street Vendors, 2) Improvement of Visual Quality of waterfront, 3) Setting new model of Circulation from Visitors and street vendor in waterfront, and 4) Relocation of The Area selling Street Vendors with four model of setting design model selling Street Vendors

References

[1] Perda Kota Pontianak 2013 Perda Nomor 2 Tahun 2013: Rencana Tata Ruang Wilayah Kota Pontianak Tahun 2013-2033 (Pontianak: Sekretaris Daerah Kota Pontianak)

[2] Permendagri 2012 Peraturan Menteri Dalam Negeri Republik Indonesia Nomor 41 Tahun 2012 Tentang Pedoman Penataan dan Pemberdayaan Pedagang Kaki Lima (Jakarta: Menteri Dalam Negeri Republik Indonesia)

[3] Akbar E P 2019 Konsep Revitalisasi Citra Tepian Air di Ruang Terbuka Koridor Sultan Muhammad Pontianak Jurnal Arsitektur Grid pp 1-10

[4] Trancik R 1986 Finding Lost Space (New York: Van Nostrand Reinhold Company)

[5] Permendagri 2007 Peraturan Menteri Dalam Negeri Nomor 1 Tahun 2007 Tentang Penataan Ruang Terbuka Hijau Kawasan Perkotaan (Jakarta: Permendagri)

[6] Shirvani H 1985 The Urban Design Process (New York: Van Nostrand Reinhold Company)

[7] Lang J 1987 Creating Architectural Theory: The Role of the Behavior Sciences in Environmental Design (New York: Van Nostrand Reinhold Company)

[8] Soesanti S 2006 Pola Penataan Massa Ruang Terbuka Pada Perumahan Waterfront Jurnal Dimensi

[9] Setiawan 1995 Arsitektur Lingkungan dan Perilaku (Yogykarta: Pusat Studi Dirjen Dekbud)

[10] Ching F D K 2015 Architecture Form, Space, And Order: Fourth Edition (New Jersey: John Wiley & Sons)