Study of locations’ characteristics for stabilization of street vendors in Surakarta City

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Abstract. Street vendors are usually centered around particular areas where they have made adaptations based on their activities, instead of scattered all over the city. These locations tend to be close to street vendors’ primary activities and consumers, occupy the public lands, and are productive and accessible. The Municipality of Surakarta has managed the street vendors in the form of stabilization and relocation. In Surakarta, there are 24 areas used for stabilization of street vendors varying in characteristics and quantities. This study uses a spatial analysis aiming to explain the characteristics of locations used for stabilization of street vendors and to identify their physical condition and arrangement. Furthermore, all of the research results will be used as the criteria in choosing the new locations that are suitable for the street vendors’ characteristics and consumers’ preference. The results show that the locations are on the roadsides of the neighborhood, local, and secondary collector roads. The traffic conditions in the stabilization areas are ranging from the very busy until relatively busy level since they are close to activities for trade, education, recreation, offices, and settlements.

Keywords: characteristics of locations, management, stabilization

1. Introduction
Surakarta City (often called Solo) is located between longitude 110°45'15"–110°45'35" east and between latitude 7°36'–7°56' south. Surakarta City is one of the major cities in Central Java that directly borders Boyolali district in the North, Karanganyar district in the east, as well as Sukoharjo district in the South and the West. This city has a size of 44.04 km² in width, consisting of five subdistricts, i.e., Laweyan, Serengan, Pasar Kliwon, Jebres, and Banjarsari subdistrict. Most of the land in this city serves as settlements (65%) and economic areas (16.5%).

The use of public lands in Surakarta is allocated to the street vendors (PKL) including the use of settlements and economic areas. The management of street vendors in Surakarta City is carried out in two ways namely relocation and stabilization, and the latter is more dominant than the first. According to study [1], street vendors prefer stabilization to relocation. Stabilization has been applied by the government since 2006 by issuing land occupation permits in public areas and uniformly granting trading infrastructures and basic facilities. All of been regulated based on the Local Regulation (Peraturan Daerah/Perda) of Surakarta City No. 3/2008. Recently, there have been 24 street vendor locations, and according to the interview with the Section Head of Street Vendors Management 2014, they were chosen for stabilization because they were close to the previous locations used by the street vendors to sell their goods. This fact accommodates the statement of researched study [2] that street
vendors choose locations near their houses so that the selected areas for the management of street vendors would not be far from the previous ones. This way can both minimize the rejection from the street vendors and control their growth. Study [3] about two organized locations for street vendors in Semarang City, also share the same opinion.

According to [4], stabilization has changed the city’s face to be more beautiful, well-arranged and more attractive to visitors. The city has also been more conducive for street vendors to do their business since they do not have to worry about being chased by municipal police who used to try to remove their stalls. Economically, not all street vendors experience an increasing income, but they believe that their earnings will increase gradually while the stabilization is being conducted.

The purpose of this research is to identify characteristics of organized locations for street vendors that are used as criteria in choosing the spots that suit the street vendors’ activities and their visitors/consumers. Furthermore, the criteria can be used as a reference in selecting new locations for stabilization of street vendors. It is important to fulfill these criteria so that the process of determining locations for stabilization can be more sustainable and the population of street vendors can be easily controlled.

2. Research Method
The research uses a descriptive qualitative approach as the method of analysis, and it is supported by the spatial technique to explain even more comprehensively. The data were collected through observations and interviews with the street vendor community leaders at each location. The triangulation was carried out by interviews with the officials at the Office of Trade, particularly Street Vendors Management Section.

3. Results and Discussion
3.1. Macro Distribution inside the City
From the identification of primary data collected through observations and interviews as well as secondary data taken from Street Vendors Management Office, it was found that the stabilization of street vendors in Surakarta City spreads across 24 locations. An area called Galabo is alternately used by street vendors working on days and at nights. To understand the macro distribution of all sites for stabilization of street vendors, a comparison of distributions among subdistricts and their distance from the downtown were drawn in the following explanation.

3.1.1. The Comparison of Distributions among Subdistricts
The results of identification indicate that the locations for stabilization of street vendors are not equally distributed among subdistricts in Surakarta. Jebres Subdistrict and Laweyan Subdistrict have quite many stabilization areas of 7 sites spread in each. On the other hand, Banjarsari Subdistrict has 6 locations, and Pasar Kliwon Subdistrict has 4 locations. However, there are also subdistricts that do not have any area of stabilization like Serengan Subdistrict. In the comparison of the population density, it can be seen that Pasar Kliwon and Serengan are the subdistricts with the highest density in Surakarta City, yet they have less number of locations of stabilization among other subdistricts. On the contrary, Jebres, Laweyan and Banjarsari that are less dense than those subdistricts mentioned above, actually have more locations of stabilization. This fact proves that population density is not a mere reference for choosing a trading site for street vendors. Based on [5], the location of street vendors orientates the highly concentrated area attended by many consumers. This evidence also conforms to the research conclusion by [4], [6] stating that the principal criteria for location management for street vendors are close to their houses, close to productive activities, full of visitors, and accessible. Having positioned near productive functions or areas with many consumers coming, street vendors can gain many profits from selling complementary products for consumers’ activities. As seen from its distribution, the locations are aimed to attract passing customers who do their functional activities from their homes to their destinations [6], even though there are some opinions from the consumers stating that their visits at the locations are merely an act of coming by and it is not their primary purpose.
Researcher [7] explains that the availability of lands, especially the ones belonging to the government, becomes the crucial factor in managing street vendors. The condition of areas at Pasar Kliwon and Serengan Subdistrict, meanwhile, are insufficient since they have been fully utilized by settlements and commercial functions. Therefore, it is difficult to find locations for the arrangement of street vendors because the lands have been dominated by the formal sector activities. The previous explanation indicates a sequence of criteria for the management of street vendors’ locations, i.e., the availability of public lands, the proximity to the productive activities, the accessibility, and the proximity to street vendors’ houses. The availability of lands, provided by the government for street vendors, has become a key to avoid conflicts and havoc. The proximity to productive activities will drive the users of the activities to visit the street vendors’ stabilized locations. The accessible locations will make consumers visit them easily. Meanwhile, one of the criteria, the proximity to the street vendors’ houses, is somewhat ignored recently since most of these street vendors have vehicles. Besides, the kinds of goods sold by the street vendors also determine the characteristics/criteria of locations for the management, and related to this fact, researcher [8] explained that street vendors have typology in choosing locations for their goods. In general, the stabilization way is more focused on street vendors selling fast food.

3.1.2. The Comparison of Location Distance with Productive Activities and the Downtown

From the field observation conducted by the researchers, it has been found that the stabilization of street vendors tends to approach productive activities in downtowns. This study, taking place in Surakarta City, also shows several productive activities most favored by the society around Manahan Stadium, Nonongan, Coyudan, Solo Grand Mall, Solo Square, as well as a golden triangle area called Gladag and Kenteingan at UNS. The locations of stabilization that are in Banjarsari Subdistrict are grouped in Manahan, Sumber, and Mangkubumen administrative villages (‘Kelurahan’) that have the furthest distance of 3 km from Manahan Stadium. The locations are also found in Kelurahan Karangasem with its furthest distance of 2 km from Solo Square. The next stabilization areas are in Laweyan Subdistrict, spreading across several villages such as Pajang, Sondakan, Sriwedari, Punggawan, and Penumping. However, the distance of these previous locations is only 0–2 km from the downtown areas like Grand Mall or Solo Square. In Pasar Kliwon Subdistrict, the locations are distributed in several areas namely the northern and the southern regions. The furthest distance of these locations to Gladag is is 0.7–3 km. In Jebres, the locations are relatively near the epicenters of this subdistrict, Administration Office of Kelurahan Mojosongo and Universitas Sebelas Maret, and their distances are 0.7–2 km. Although they are not nearby the city centers in Surakarta, these locations are close to other activities that are very productive, and this situation confirms the existence of street vendors as an “activity support” for those other hustles [9].

3.2. The Quantity Connection of Street Vendors Number

Besides the macro distribution in the city, researchers also identified the number of stabilized street vendors in the city based on the activities approached, the road function, and the traffic level.

The activities approached by the stabilization locations are one of the subjects of this discussion. Based on the field observation, most of the locations are near trading activities and settlements (13 sites). The next activities that also draw the street vendors are office activities (11 locations). Recreation activities fairly attract street vendors as well of 6 surrounding locations. There are also locations of stabilized street vendors that are near education and sports centers as many as 3 locations for each. The other activities like warehouses, health, and industries were chosen as well though the numbers of vendors are not as many as the previously listed sectors. Trading and settlements have the most identified vendors, so it shows that those primary activities drive high and diverse movements and businesses. Hence, they are considered as the most appropriate locations for the street vendors management, conforming to study [4], [6].

Based on the identification of site arrangement seen from road functions, there are 11 out of 24 locations for stabilization of street vendors in Surakarta City that are established at neighborhood roads, whereas the other 13 locations are at local roads and secondary collector roads (Table 1).
The locations do not have to be on roads with a higher class since they have been situated at major streets. Considering that the settlements have highly concentrated movement even though settled at local and neighborhood roads, the locations of street vendors are quite possibly at the local or neighborhood streets. This condition is relevant to the accessibility criteria and fits the typical rapid movement of the society, so the locations at the collector roads are still well-matched with street vendors’ characteristics, intercepting people in running their functional activities [6].

The condition of stabilization locations in Surakarta City complies with the previously mentioned theory. Researchers [5] stated that the number of street vendors in one location highly determines the chosen strategy. The number of traders observed based on the road types in each site can be compared with each other. There are various locations containing a number of merchants. The size can be of 21–40 traders, 41–70 traders, or even more than 70 traders, and these locations are situated at local and neighborhood roads. The sites containing 11–20 merchants tend to occupy the roads that have higher function—in this case are collector roads, while the locations with 10 traders or less occupy most of the neighborhood streets. Therefore, the tendency is that street vendors with a larger number are settled at the local and neighborhood roads while the ones with a smaller number are located at secondary collector roads. This fact is also caused by the availability of lands, and according to [7], it often becomes the substantial reason whether the management of street vendors is necessary or not. Upon that account, the availability of lands for the management of street vendors at both local and neighborhood roads are more than the ones at collector roads. The velocity of vehicles at collector roads that is higher than the one at local and neighborhood roads is also the reason why the street vendors are difficult to survive due to the unwillingness of consumers to stop. Although it is not directly related, the traffic level aspect and the high velocity of vehicles will bring disadvantages for the street vendors. Another side of the traffic parameter is also discussed in the following paragraph.

Based on the observation, the locations of stabilization are established at various roads ranging from the ones with relatively busy level to the ones with highly busy level. As seen in Table 1, there are 5 locations with highly busy level, 10 locations with busy level, and 9 locations with relatively busy level. The traffic level of those locations exists in the roads with varied functions. The locations of stabilization at secondary collector roads are dominated by highly busy road level, the locations of stabilization at roads having local functions are dominated by busy road level, and the locations of stabilization at neighborhood roads are dominated by relatively busy road level.

| No | Locations | Characteristics |
|----|-----------|-----------------|
| 1  | Shelter Near Pasar Notoharjo | There are 16 traders, the activities approached are trading activities, located at neighborhood roads, the traffic condition is relatively busy, the distance from Surakarta City Hall is 3km. |
| 2  | Shelter at Silir Notoharjo | There are 33traders, the activities approached are trading activities, located at neighborhood roads, the traffic condition is relatively busy, the distance from Surakarta City Hall is 3 km. |
| 3  | Shelter at Galabo Malam | There are 25traders, the activities approached are trading activities particularly inservices, located at local roads, the traffic condition is highly busy, the distance from Surakarta City Hall is 1 km. |
| 4  | Shelter at Lapangan Mojosongo | There are 20traders, the activities approached are settlements, located at secondary collector roads, the traffic condition is highly busy, the distance from the Administration Office of KelurahanMojosongo. |
| 5  | Shelter at Komplang | There are 23traders, the activities approached are trading activities particularly inservices and office activities, located at secondary collector roads, the traffic condition is highlybusy, the distance from Manahan Area is 3 km. |
| 6  | Shelter at PDAM | There are 11traders, the activities approached are office activities and settlements, located at neighborhood roads, the traffic condition is relatively busy, the distance from Manahan Area is 4 km. |
| 7  | Shelter at Kolang Kaling | There are 26traders, the activities approached are office activities and settlements, located at neighborhood roads, the traffic condition is busy, the distance from Manahan Area is 4 km. |
| 8  | Shelter at Sekartaji | There are 7traders, the activities approached are recreational and trading activities, located at neighborhood roads, the traffic condition is relatively busy, the distance from UNS is 2.5 km. |
| 9  | Shelter at Pedaringan | There are 7traders, the activities approached are activities in warehouses, located at neighborhood roads, the traffic condition is relatively busy, the distance from UNS is 2.5 km. |
| 10 | Shelter at Timur Jurug | There are 6traders, the activities approached are recreational activities and settlements, located at local roads, the traffic condition is busy, the distance from UNS is 2 km. |
| 11 | Shelter at Galabo | There are 12traders, the activities approached are trading activities and settlements, located at secondary collector |
| No | Locations                      | Characteristics                                                                                                                                 |
|----|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 12 | Shelter at Pucang Sawit        | There are 6 traders, the activities approached are trading activities and settlements, located at secondary collector roads, the traffic condition is busy, the distance from UNS is 1.5 km. |
| 13 | Shelter at Pucang Urban Forest | There are 4 traders, the activities approached are settlements and industrial activities, located at neighborhood roads, the traffic condition is relatively busy, the distance from UNS is 2 km. |
| 14 | Shelter at Solo Square Fruit   | There are 60 traders, the activities approached are trading activities particularly in services and settlements, located at neighborhood roads, the traffic condition is busy, the distance from Solo Grand Mall is 3 km. |
| 15 | Shelter at Purwosari            | There are 5 traders, the activities approached are trading activities particularly in services and settlements, located at neighborhood roads, the traffic condition is relatively busy, the distance from Solo Grand Mall is 2 km. |
| 16 | Shelter at Jl. Supomo Culinary  | There are 20 traders, the activities approached are recreational activities, located at neighborhood roads, the traffic condition is busy, the distance from Solo Grand Mall is 1 km. |
| 17 | Culinary Shelter at Telkom      | There are 10 traders, the activities approached are trading activities particularly in services and recreational activities, located at local roads, the traffic condition is busy, the distance from Solo Grand Mall is 1 km. |
| 18 | Shelter at Galabo Siang         | There are 54 traders, the activities approached are trading activities particularly in services, located at local roads, the traffic condition is highly busy, the distance from Surakarta City Hall is 1 km. |
| 19 | Shelter at Manahan KS Tubun     | There are 37 traders, the activities approached are recreational activities, sport activities, and office activities, located at neighborhood roads, the traffic condition is busy, the distance from Manahan Area is 0 km. |
| 20 | Shelter at Manahan Menteri Supeno | There are 76 traders, the activities approached are recreational activities, sport activities, and office activities, located at local roads, the traffic condition is busy, the distance from Manahan Area is 0 km. |
| 21 | Shelter at SD Kristen Manahan   | There are 34 traders, the activities approached are educational activities and settlements, located at neighborhood roads, the traffic condition is busy, the distance from Manahan Area is 0.5 km. |
| 22 | Shelter at Hasanudin            | There are 30 traders, the activities approached are settlements and trading activities particularly in services, located at local roads, the traffic condition is relatively busy, the distance from Manahan Area is 1 km. |
| 23 | Shelter at SD Kota Barat        | There are 23 traders, the activities approached are sport activities, educational activities, trading activities, settlements, and office activities, located at secondary collector roads, the traffic condition is highly busy, the distance from Manahan Area is 1 km. |
| 24 | Shelter at Wahidin              | There are 13 traders, the activities approached are trading activities particularly in services, office activities, and health care activities, located at secondary collector roads, the traffic condition is highly busy, the distance from Solo Grand Mall is 0.5 km. |

**Figure 1.** The distribution map of locations for street vendor’s stabilization in Surakarta City.

**4. Conclusion**

The management of street vendor locations in Surakarta City considers the availability of public lands, the proximity to the town center, the proximity to the main activities (particularly trading and settlements), the traffic levels, and the accessibility. However, the number of stabilized street vendors and the distance of the stabilization locations to the city centers and street vendors’ houses are less considered in this case although they are included in the primary criteria.
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