

THE CONNECTION BETWEEN LAND USE CHANGE PROCESS AND STREET VENDOR PREFERENCES WHILE CHOOSING A TRADE LOCATION: A CASE STUDY AT PEKANBARU CITY, INDONESIA

Zaflis Zaim & Kiki Nurjanah

Urban & Regional Planning Department, Islamic University of Riau, Indonesia

zaflis@eng.uir.ac.id

Abstract

The City is a development center especially for formal sectors, so that it will be as a prospective location for much people. The population rate of Pekanbaru city rise highly 4,47% in 2010 to 2011, and have been effecting the labor market. However, the limitation of employment have push citizens to come and working at informal sector as street vendors. The purpose of this study are to analysis the influence factors in choosing a trade locations by street vendors, and the relationship with land use change process in Pekanbaru city since 1984 - 2014. Based on the result, there are a relationship between the characteristics of street vendors with the selection of trade locations in 3 location such as: Sudirman street, WR Soepratman and HR Soebrantas street. From the analysis using cross tabulation and chi-square test, HR Soebrantas street has a strong relationship between street vendors characteristic with trade location. Type of goods or commodity has a strong relationship with the distance of activities center in HR Soebrantas street with rate 0,556 (coefficient contingency). Others variables that have a relationship are type of commodity with the residencies of the street vendors; number of asset with proximity of trade and site location. As conclusion, a settlement area with variety in land use function will get attention from the street vendors. The dominant factor while they choose a trade location that the location should be close to an activity center area, close to their house, and the trade location must be strategic or achieve an others advantage. Three factors are being a preference for street vendors while choosing a location.

Keywords: *Preference, Street Vendor, Land use change*

INTRODUCTION

Population growth of Pekanbaru city rose highly 4,47% in 2010-2011 which effect to the size of labor force. Increasing the size of labor force without balanced in job vacancies in formal sectors has been increase the amount of unemployment. Therefor, it cause the citizen have to work or survive in informal sector as a street vendors (Budiman, 2010). This is convenient with informal sector characteristics such as; open employment opportunities easily, flexible in place and time, rely on local resources and small business scale.

Street vendors (called as PKL = pedagang kaki lima) are merchant who make transaction or sell something in roadside like: a sidewalk or pathway without permission from the government. According to Perda number 5/2002 as local regulation about public order that street vendors have to sell in the place provided by government. According to The Great Indonesian Dictionary, PKL is trader which take place in front of shops or pathway.

In pursuance of Hart (2000) that formal and informal sector can be distinguished in some category which based on activities performed by each individual, number of income and expenditure while stream down in urban economics, seen from the regularity of the working, relationship with the company, outpouring of time, law status of activities organized. The definition of formal sector is driven as a sector consists of business units that have acquired various economic protection of government. However, informal sector is business units that have not protection of government despite of the assistance has provided. Accessibility criteria toward one facility that have been provided by government is used as a measure to differentiate between informal sector and formal sector business.

Another mind from Wirasarjono (1979) told that the characteristic of informal sector can describes:

1. Business activities are not well coordinated, due to the business unit does not use facility or institutional which is available in informal sector.
2. In general, they have not permit.
3. Business activities form are not organized well, include location and business hours.
4. Government policies to help low income groups generally can not arrive to others sector.
5. Unit business which can move in or out easily from a sub sector to another sub sector.
6. Using simple technology.
7. Capital & business turn over is small relatively, so scale of operation is minor.
8. They dont need a formal education to operate their business, because the education achieve from their experience while working.
9. In general, unit business was include in one man enterprises group. Some employer came from his/her family.
10. Capital source dan business result come from own saving or from non official finance institution.
11. Production result or services is consumed by rural or urban communities with low income dan sometimes in the middle income too.

To knowing whether a unit business is including in formal business unit or informal therefor must be considered all item of 11 characteristics above. If one of them have some characteristics, so the business unit can be categorized as informal sector unit.

1.1. The influencing of the distance of residence .

According to Suharsoin Widodo (2000) said that the immigrant choose their residence and business location will based on some consideration such as: cheap factor, near to their friends, almost same in the type of business, near to the market location and easy to reach with low cost.

1.2. Trade location theory.

Referring to Berry in Asteriani (2005) that the pattern of general trade distribution pattern will adjust consumer distribution. Trade center will located in the area with a lot of consumer which can be serve with maintain a competition for threshold size. Diana in Asteriani (2005) told that the determinants factor of growing the trade location such as: threshold size, accessibility, spatial connection, distance; there is a trend from the buyer for shopping in dominant location, but they like to the nearest location, complete trading facility.

RESEARCH METHODOLOGY & TECHNIQUE

This is an *explanatory* research with survey, questionnaire and in deep interview. Survey method is proposed to explain the relationship between variable with statistical test. Quantitative approach will conduct to hypothesis testing toward variables that have relation between street vendors (PKL) characteristic with trade site selection. Beside that, qualitative approach also will use as support while analysis to land use change around trade area that have a relationship and significant linkage cross the variable.

The analysis technique will use frequency table and statistical test by cross tabulation. The frequency table will use to describe all of respondent characteristic. Cross tabulation analysis provide with chi-square test to see the relationship between variables. Hypothesis of chi-square test are:

- a. Ho: there is no relationship between PKL characteristic & trade site selection.
 b. H1: there is a relationship between PKL characteristic and trade site selection.

The determination for decision making is based on probability (*asympt.Sig*) :

- a. If *Asymp.Sig value (2 sided)* > 0,05 = no relationship (Ho accepted)
 b. If *Asymp.Sig (2 sided)* < 0,05 = there is a relationship (H1rejected)

The Coefficient Contingency is used for calculate relationship degree between variables. It have strong relationship if the result is close to 1, and weak if near to 0. Analysis process will needed a SPSS software (*Statistical Product and Service Solution*). The qualitative analysis will describe the land use change and growth by time series since 1984-2013, and see their site for trade base on surveying. Some research variable can be seen in the table below.

Table 1. Research Variables

No	Indicators/Variable	Description
A	PKL Characteristic's:	
1	Type of goods/commodity	1 = Food & beverage 2 = Non food & beverage 3 = Services
2	Business time	1 = daylight 2 = afternoon 3 = Night
3	Business site characteristic's	1 = Settle 2 = moving 3 = roving
4	Tool for trade	1 = cart 2 = Pad 3 = tent 4 = desk 5 = Car
5	Number of capital	1 = <Rp. 250.000 2 = Rp. 250.000 – Rp. 500.000 3 = Rp. 500.000 – Rp. 1000.000 4 = > Rp. 1000.000
6	Income per day	1 = <Rp. 250.000 2 = Rp. 250.000 – Rp. 500.000 3 = Rp. 500.000 – Rp. 1000.000 4 = > Rp. 1000.000
7	Vehicle for transportation	1 = walking 2 = bicycle 3 = public transport 4 = Motorcycle 5 = Car
8	Age	1 = < 30 year 2 = 30 – 40 3 = 41 – 50 4 = > 50
9	Education level	1 = Elementary school 2 = Junior high school 3 = senior high school 4 = University
B	The factor of trade site selection:	
1	distance to central activities	1 = < 100 m (near) 2 = 100 – 200 m (moderate) 3 = > 300 m (far)
2	distance to residence	1 = < 1 Km (near)

		2 = 1 – 2 Km (moderate) 3 = > 3 Km (far)
3	Public transport at business site	1 = easy 2 = moderate 3 = difficult
4	Number of the same seller in the location	1 = much 2 = moderate 3 = little
5	Site condition	1 = comfortable 2 = safe 3 = clean 4 = Strategic

1.3. Scope of Study

Some area for research have chosen in Pekanbaru city which are location of PKL for trading. See the table below.

Table 2. Number of PKL at some Location in Pekanbaru City

No	Research Location	Number of PKL
1	HR.Soebrantas street	120
2	JenderalSudirman street	45
3	WR.Supratman street	41
4	Sultan SyarifKasim street	27
5	Pepaya street	30
6	RonggoWarsito street	26
Total		289

From the tabel, the research will take 3 location where the number of PKL is dominant. The location are: HR Soebrantas street (120 PKL), Sudirman street (45 PKL), and WR Supratman street (41 PKL). The analysis will organised to find the relationship between PKL characteristic's toward their trade location, so that know which area more significant. Each location will connected to land use growth anaysis since 1984 to now.

RESERACH RESULT

1.4. The Characteristics of PKL

From the survey, we know some characteristics of PKL and trade site selection. The characteristics are kind of goods, business time, business site characteristic, tool for trade, number of capital, income per day, vehicle for transportation, education level, and their age. For the site choise, such as: distance to central activities, distance to residence, public transport at business site, number of the same seller in the location, and site condition.

There are 71 PKL who selling some food and drink, non-food and drink 23, and service 26 in Soebrantas street. Other location can see in the table.

Table 3. Type of Goods by PKL in Pekanbaru City

No	Goods/ Commodity	Location/ street			Total
		HR.Soebrantas	Sudirman	WR.Supratman	
1	Food/ beverage	71	45	41	157
2	Non-food/ beverage	23	0	0	23
3	Services	26	0	0	26
Total		120	45	41	206

Table 4: Business Time of PKL

Business Time	Location/ street			Total
	HR.Soebrantas	Sudirman	WR.Supratman	
Daylight	38	12	34	84
Afternoon	20	10	7	37
Night	62	23	0	85
Total	120	45	41	206

Referring to business site, business site characteristic of the PKL in HR Soebrantas street is settle with number 109, and the others are moving or roving. In Sudirman street, most of them are settle. However, all PKL in WR Supratman street have business site characteristic as settle.

Each PKL have capital for trade in Pekanbaru city. We can clasify that 83 PKL have capital around 250.000 to 500.000 rupiah; 35 PKL have capital around 500.000 to 1.000.000 rupiah; both of them are in the HR Soebrantas site. Base on the data, most of them gain profit between Rp.250.000–Rp.500.000 per-day. But in special day like Sunday or holiday, number of profit will achieve more than Rp.1.000.000 per day.

Table 5. Income per day each PKL

Number of Income	Street			Total
	HR.Soebrantas	Jend.Sudirman	WR.Supratman	
<Rp. 250.000	27	4	5	36
Rp.250.000 - Rp.500.000	69	6	7	82
Rp.500.000 - Rp.1.000.000	24	30	24	78
>Rp. 1.000.000	0	5	5	10
Total	120	45	41	206

Table 6. Education Level's of PKL

Education level	Street			Total
	HR.Soebrantas	Jend.Sudirman	WR.Supratman	
Elementary School	0	0	9	9
Junior high school	29	3	13	45
Senior high school	91	42	19	152
University	0	0	0	0
Total	120	45	41	206

1.5. An Analysis While Choosing a Trade Site

According to the street vendors (PKL), a distance to central activities is an important factor to determine a trade site. The prospective of central activities such as downtown/CBD, Office area, education complex, housing complex, shopping center, and the road where is many people and car always passed. Base on the survey, in 3 location of the street are close with central activities, especially in HR Soebrantas street. The street is very close with housing complex, shopping center, education complex like Riau University and academy of economic. Also the street is a strategic pathway to West Sumatera province.

In the Sudirman and WR Supratman street are also in central business district or down town and near to Zainab hospital, Riau university, MTQ complex and hotel. See the table.

Table 7. The Distance between Trade site and Central Activities

Distance/ range	Location			Total
	HR.Soebrantas	Jend.Sudirman	WR.Supratman	
< 100 meter	52	22	41	115
100 - 500 m	64	20	0	84
> 500 m	4	3	0	7
Total	120	45	41	206

According to study, we know about the distance between trade site and PKL's house in 3 area/ street. See the table below. Most of them was living around 1-5 km from their trade site.

We conduct some interview with PKL in 3 area. According PKL in HR Soebrantas and Sudirman street that there is some public transportation easily to go their trade site. It is different with WR Supratman where is not public transportation around the location.

Table 8. Public Transportation Availability in the Location

Getting Public Transport	Location/ street			Total
	HR.Soebrantas	Sudirman	WR.Supratman	
Easy	120	45	0	165
Quite difficult	0	0	0	0
Difficult	0	0	41	41
Total	120	45	41	206

Then, base on the survey and result, we know that many PKL will choose a trade site with strategic value. See the table below.

Table 9. Trade Site Condition & Value

No	Condition & Value	Location/ street			Total
		HR.Soebrantas	Jend.Sudirman	WR.Supratman	
1	Comfortable	10	0	4	14
2	Secure	10	0	0	0
3	Clean	9	9	6	24
4	Strategic	91	36	31	158
	Total	120	45	41	196

1.6. Relationship Analysis between Type of Goods with Trade site Location.

According to cross tabulation analysis with Chi Square test, we will know the relationship between type of goods or commodity with trade site location that have choose by PKL. In this part, the analysis result just explained and focus for some variable in HR Soebrantas street due to the number of PKL in this street much more than the others.

1.6.1. HR Soebrantas street.

Table 10. The Correlation between Type of Commodity and the Distance to Central Activities

Characteristics		Location choice		The Distance to Central Activities			Total
		Near	Moderate	Far			
Type of Commodity	Food & beverage	30	37	4			71
	Non Food/ beverage	22	0	0			22
	Service	0	27	0			27
Total		52	64	4			120

Asymp.Sig	0,000	Conclusion: There is a correlation between type of goods/ commodity with the distance to central activities. (therelation is significant).
Contingency Coefficient	0,556	

Table 11. The Correlation between Type of Goods/ Commodity& the Distance to Residence

Characteristic		The Distance to Residence			Total
		Near	Moderate	Far	
Type of Commodity	Food & beverage	9	2	60	71
	Non Food & beverage	1	21	0	22
	Services	0	0	27	27
Total		10	23	87	120
Asymp.Sig		0,000			
Contingency Coefficient		0,685			
		Conclusion: There is a correlation between type of goods/ commodity with the distance to residence (Contingency Coefficient is strong)			

Table 12. The Correlation between Type of Goods/Commodity and Trade Site Condition

Characteristic		Site Condition				Total
		Comfortable	Safe	Clean	Strategic	
Type of Commodity	Food & beverage	0	0	9	62	82
	Non Food & beverage	0	10	0	12	22
	Services	10	0	0	17	27
Total		10	10	9	91	120
Asymp.Sig		0,000				
Contingency Coefficient		0,651				
		Conclusion: There is a correlation between type of goods/ commodity with site condition. (the relation is significant).				

From the analysis above, we can assume that street vendors (PKL) will choose a trade site near to central activities, far from their resident and choosing a site with minimum trader. Other result (chi-square analysis) told that there is not relationship between type of goods and public transportation at business site. Because most of them are use own motorcycle or bicycle.

Table 13. The Correlation between Business Time and the Distance to Central Activities

Characteristic		The distance to central activities			Total
		Near	Moderate	Far	
Business Time	Daylight	6	28	4	38
	Afternoon	20	0	0	20
	Night	26	36	0	62
Total		52	64	4	120
Asymp.Sig		0,000			
		Conclusion:			

Contingency Coefficient	0,581	There is a correlation between business time and the distance to central activities. (not significant).
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Table 14. The Correlation between Business Time and the Distance to Residence

Characteristic \ Location/site		The Distance to Residence			Total
		Near	Moderate	Far	
Business Time	Daylight	9	2	27	38
	Afternoon	0	20	0	20
	Night	1	1	60	62
Total		10	23	87	120
Asymp.Sig		0,703	Conclusion : There is a correlation between business time and the distance to residence (significant)		

Table 15. The Correlation between Business Time and Number of the Same Seller at the Location

Characteristic \ Location		Number of the Same Seller at location			Total
		Much	Moderate	Little	
Business time	Daylight	0	25	13	38
	Afternoon	0	10	10	20
	Night	0	20	42	62
Total		0	65	55	65
Asymp.Sig		0,004	Conclusion: There is a correlation between business time and the same seller in the location (Contingency Coefficient is weak)		
Contingency Coefficient		0,288			

Table 16. The Correlation between Business Site &the Distance to Central Activities

Characteristic \ Trade Location		The distance to central activity			Total
		Near	moderate	Far	
Business site	Settle	50	55	4	109
	Moving	2	0	0	2
	Roving	0	9	0	9
Total		50	55	4	120
Asymp.Sig		0,028	Conclusion: There is a correlation between business site characteristic and the distance to central activity (contingency coefficient is weak).		
Contingency Coefficient		0,288			

Table 17. The Correlation between Business Site Characteristic and the Distance to Residence

Characteristic \ Location		The Distance to Residence			Total
		Near	Moderate	Far	
Business Site	Settle	8	23	78	109
	Moving	2	0	0	2

	Roving	0	0	9	9
Total		8	23	87	120
Asymp.Sig		0,000	Conclusion : There is a correlation between business site characteristic and the distance to residence.		
Contingency Coefficient		0,420			

Table 18. The Correlation between Business Site Characteristic And The number of same seller

Characteristic		Number of the same Seller in the Location			Total
		Many	Middle	A little	
Business Site	Settle	0	45	64	109
	Moving	0	1	1	2
	Roving	0	9	0	9
Total		0	55	65	120
Asymp.Sig		0,003	Conclusion : There is a correlation between business site characteristic and the number of same seller in the location. (contingency is weakness).		
Contingency Coefficient		0,296			

From the analysis, PKL will choose and stay near to the central activities, far from their residence, and organise his/her business with minimum size of the same seller.

1.7. The Correlation of Capital Size Analysis & Trade Site Selection

Referring to the analysis, there is a variable that has correlation with capital size i.e: the distance to central activities, distance to residence, number of the same seller, and condition of the location.

Table 19. The Correlation between Capital Size and the Distance to Central Activities

Characteristic		Location	The distance to central activities			Total
			Near	moderate	Far	
Capital size	<Rp. 250.000		0	0	0	0
	250.000 – 500.000		28	55	0	83
	500.000 – 1000.000		22	9	4	35
	>Rp. 1000.000		2	0	0	2
Total			52	64	4	120
Asymp.Sig			0,000	Conclusion : There is a correlation between capital size and the distance to central activities.		
Contingency Coefficient			0,431			

Table 20. The Correlation between Capital Size and the Distance to Residence

Characteristic		Location	The Distance to the Residence			Total
			Near	moderate	Far	
Capital size	<Rp. 250.000		0	0	0	0
	Rp 250.000 – 500.000		3	2	78	83
	Rp.500.000 – 1000.000		6	20	9	35

	>Rp. 1000.000	1	1	0	2
Total		10	23	87	120
Asymp.Sig		0,000	Conclusion: There is a correlation between capital size and the distance to residence. (contingencycoeff is strong.)		
Contingency Coefficient		0,579			

3.5. The Correlation of Income per day and Trade Site Selection

Street vendors took place for trading near to the central activities can be achieve high income per day than others place. It will be same if they sell near the strategic place with minimum number of the same traders. So, the correlation can be seen in the table below:

Table 21. The Correlation Between Income per dayand the Distance to Central Activities

Characteristic \ Location		The Distance to central activities			Total
		Near	Moderate	Far	
Income per day	<Rp. 250.000	0	27	0	27
	250.000 –.500.000	28	37	4	69
	500.000–1000.000	24	0	0	24
	>Rp. 1000.000	0	0	0	0
Total		52	64	4	120
Asymp.Sig		0,000			
Contingency Coefficient		0,565			
		Conclusion: There is a correlation between income per day and the distance to central activity (contingency coefficient is strong).			

Table 22. The Correlation between Income per dayand the Distance to Residence

Characteristic \ Location		The Distance to Residence			Total
		Near	Moderate	Far	
Income per day	<Rp. 250.000	0	0	27	27
	Rp. 250.000 –.500.000	8	1	60	69
	Rp.500.000- 1000.000	2	22	0	24
	>Rp. 1000.000	0	0	0	0
Total		10	23	87	120
Asymp.Sig		0,688			
		Conclusion : There is a correlation between Income per day and the distance to residence. (significant).			

3.6. Recapitulation Record of The Correlation Between PKL Characteristic's and Trade Site Selection in HR Soebrantas Street

According to the analysis above, there are significant correlation related to trade site selection by PKL, such as :

- There are some significant correlation between type of goods and the distance to central activities, that all street vendors (PKL) is prefrence to the populous location or as central activities. The condition is easier to get their consumen.
- There is a correlation between type of goods and the distance to residence; and have strong correlation with trade site condition. The street vendors (PKL) is prefrence to choose a trade location and near to their residence, cause efficiency factor for transportation. The assumption is correlated to Turner theory that the low income people is prefrence and make priority for their resident near to the work place. So the condition will give them some facility easily and jobs vacancy. (Turner, 1972).

**Table 23. Recapitulation Record of The Correlation between
 PKL Characteristic's and Trade Site Selecion in HR Soebrantas street**

Location Characteristic PKL. Characteristics	Distance to Central Activities	Distance to residence	Public Transport at Business Site	Number of same seller in the Location	Site Condition
Type of Goods/ Commodity	Significant	Significant	Not Significant	Not Significant	Significant
Business time	Significant	Significant	Not Significant	Not Significant	Significant
Business Site Characteristic's	Not Significant	Not Significant	Not Significant	Not Significant	Significant
Tool for trade	Not Significant	Not Significant	Not Significant	Not Significant	Significant
Number of Capital	Not Significant	Significant	Not Significant	Not Significant	Significant
Income per day	Not Significant	Significant	Not Significant	Not Significant	Significant
Vehicle for transportation	Not Significant	Significant	Not Significant	Not Significant	Significant
Age	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant
Education level	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant

3.7. Recapitulation Record of The Correlation between PKL Characteristics's and Trade Site Selection in Sudirman Street

**Table. 24. The Recapitulation of Correlation between PKL Characteristics's
 and Trade Site Selection in Sudirman Street**

Location characteristic PKL Characteristic	Distance to Central Activities	Distance to residence	Public Transport at Business Site	Number of same seller in the Location	Site Condition
Type of Goods/ Commodity	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant
Business time	Not Significant	Not Significant	Not Significant	Not Significant	Significant
Business Site Characteristic's	Not Significant	Not Significant	Not Significant	Not Significant	Significant
Tool for trade	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant
Number of Capital	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant
Income per day	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant
Vehicle for transportation	Significant	Significant	Not Significant	Not Significant	Significant
Age	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant
Education level	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant

3.8. Recapitulation Record of The Correlation Analysis between PKL Characteristic's and Trade Site Selection in WR Supratman street

Table 25. Recapitulation of The Correlation between PKL Characteristic's and Trade Site Selection in WR Supratman street.

Location characteristic PKL Characteristic's	Distance to Central Activities	Distance to residence	Public Transport at Business Site	Number of same seller in the Location	Site Condition
Type of Goods/ Commodity	NotSignificant	NotSignificant	NotSignificant	NotSignificant	NotSignificant
Business time	NotSignificant	NotSignificant	NotSignificant	NotSignificant	NotSignificant
Business Site Characteristic's	NotSignificant	NotSignificant	NotSignificant	NotSignificant	NotSignificant
Tool for trade	NotSignificant	NotSignificant	NotSignificant	NotSignificant	NotSignificant
Number of Capital	NotSignificant	NotSignificant	NotSignificant	NotSignificant	NotSignificant
Income per day	NotSignificant	NotSignificant	NotSignificant	NotSignificant	NotSignificant
Vehicle for transportation	NotSignificant	NotSignificant	NotSignificant	NotSignificant	NotSignificant
Age	NotSignificant	NotSignificant	NotSignificant	NotSignificant	NotSignificant
Education level	NotSignificant	NotSignificant	NotSignificant	NotSignificant	NotSignificant

3.9. The Connection between Land Use Change Process and Street Vendor Preference since 1984-2014

Referring to the identification of land use since 1984 in Tampan sub district of Pekanbaru city, we can describe that there is a correlation between land use change 1984-2014 and the preference of PKL in the location. PKL was there since 2007 mainly in main street of HR Soebrantas at Tampan.

Table 26. The Percentage of Land use size in Tampan, 1984

Indicators	Land Use Pattern 1984			Total
	Settlement	Shrubs	Forest	
Number (ha)	0.1	0.16	923.65	923.91
Percentage (%)	0.01	0.02	99.97	100.00

According to the table above, most of land use area in Pekanbaru is a forest 923,65 ha (99,97%). From an interview, there is no street vendors around the location.

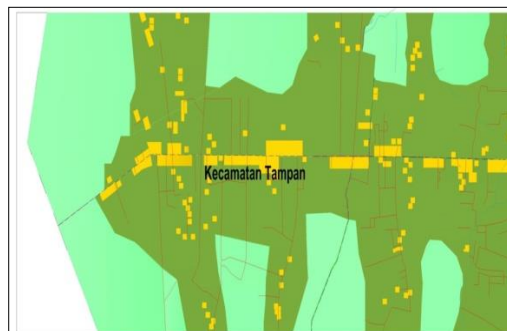
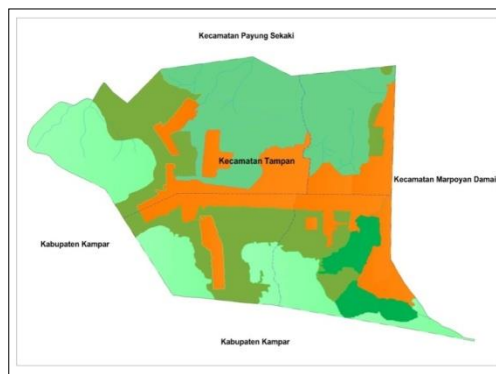


Figure 1. Land Use Pattern in Tampan Sub-district of Pekanbaru in 1984

*Table 27.*The number & Percentage of Land use size in Tampan Sub-district Pekanbaru, 1991

Indicators	Land Use Pattern in 1991					Total
	Brushwood	Forest	Shrubs	Built up Area	Fields	
Number (ha)	292.74	1295.38	1323.24	1403.97	1525.23	5840.56
(%)	5.01	22.18	22.66	24.04	26.11	100.00

Start in 1991, there are some function of land use that the fields as a dominant function with 1525.23a (26.11%), and shrubs 1.323.24 (22.66%), and forest 1295.38 (22.18%),. However, Pekanbaru city has land administration at that time is 5840.56 ha totally.



*Figure 2.*Land Use Pattern in Tampan Sub-district of Pekanbaru in 1991

*Table 28.*The number & Percentage of Land use size in Tampan Sub-district Pekanbaru, 2002

Indicators	Land Use Pattern						Total
	Shopping/retail	Settlements	Education area	Settlements (un-organised)	Shrubs	Brushwood	
Number/ha	14.24	274.47	480.23	699.26	2365.95	2898.17	6732.32
Percentage	0.21	4.08	7.13	10.39	35.14	43.05	100.00

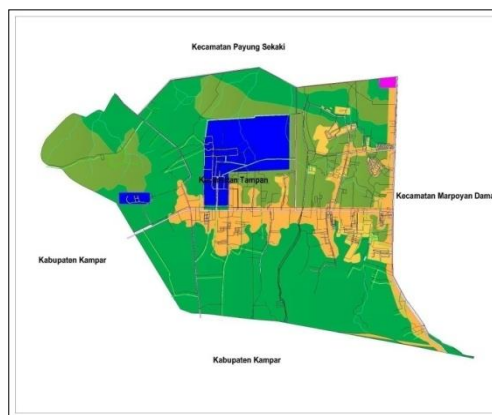


Figure 3. Land Use Pattern in Tampan Sub-district of Pekanbaru in 2002

The picture below is describe the percentage of land use according their type in 2006. Referring to the data, land use totally is 6.736,79 ha and it's contain such as: office area (0,01%), open space (0,02%), retail & services (0,82%), housing with middle-high density (2,33%), education area (7,31%), non built up area (7,32%), formal settlement (31,31%) and housing with low-middle density (51,07%) Since 2007, PKL distribution has been develop in HR Soebrantas street in linear form (see the map below).

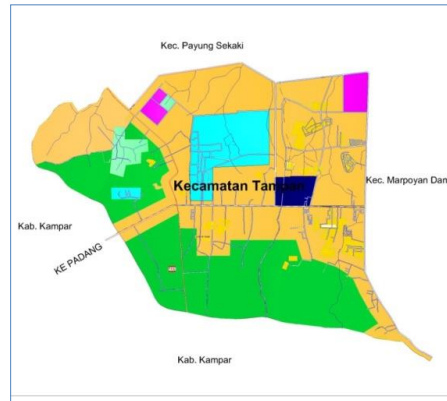


Figure 4. Land Use Condition Map in Tampan Sub-district 2006

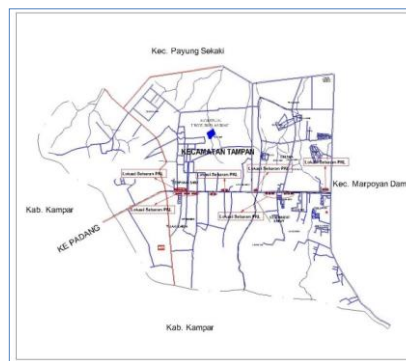


Figure 5: PKL Distribution in Tampan sub-district, 2007

Following land use change process, where is the number of built up area has been change from 6244.19 ha in 2006 to 6736.79 ha in 2010, so that it has been seen the size and distribution of PKL around HR Soebrantas street in 2014. See the figure below.

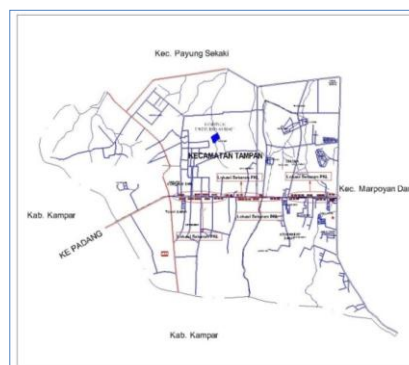


Figure 6. PKL Distribution along HR Soebrantas street since 2013-2014

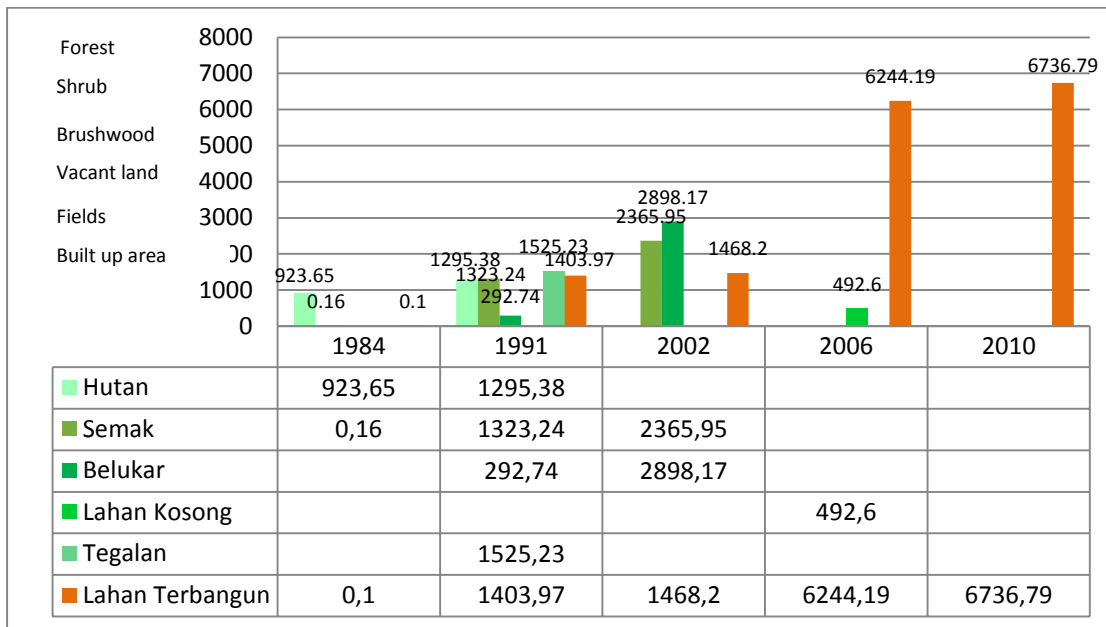


Figure 7. Comparing of land use area since 1984-2010 in Tampan (hectar)

3.10. The Overall Land Use Change Process in Pekanbaru

Base on The Government Regulation Number 19/1987 date September 7, 1987 Pekanbaru city has expansion in 1987 from 62,96 Km² to 446,50 Km². However, BPN or national land agency suvey and measure the city border that the area of city is 632,26 Km². With the expansion policy, so the population rate increase 45%.

Land use change process in Pekanbaru city can be described base on the map below since 1980 to 2000. The urban growth pattern before expansion is only concentric. After expansion in 1987, there are 3 kind of pattern such as: concentric at CBD (central busines district); liniear pattern; and leap frog development. The liniear pattern grew-up along main road with commercial use as dominant areas. (Malik, H, 2002).

There is a relationship between land use change and the preference of PKL. Physically, Pekanbaru has been growing to west and south of urban area. The built up area in the west of the city was growth faster than the others which is 0,1 ha in 1984, 1.468,2 ha in 2002 and 6.736,79 ha in 2010. From figure 8, land use change in Pekanbaru is described.

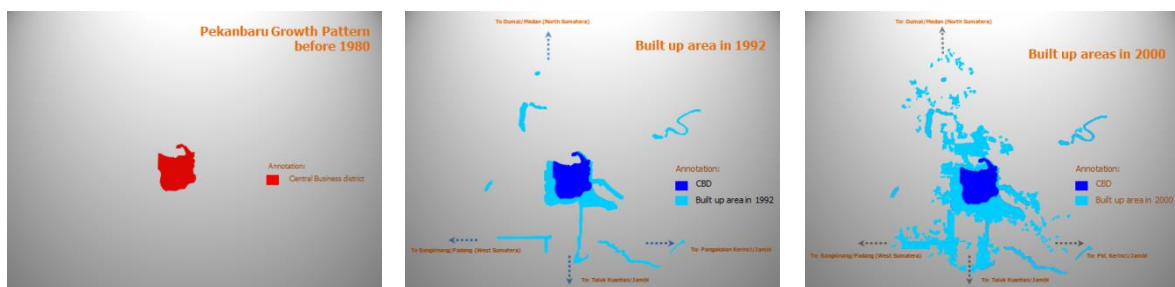


Figure.8 Land Use Change Process in Pekanbaru city since 1980-2000

4. CONCLUSION

From the recapitulation on the streets, only HR Soebrantas have strong correlation significantly. Some aspects are preferences of PKL to choose a location for trade site:

- a. *The site is near to the central activities and as a populous area.* PKL with food and beverages their commodities will choose a trade site near to central activities and at night while trading. The kind of central activities are housing, shopping center, education complex, and commercial areas.
- b. *The Distance to residence.* PKL who sale food and beverage, their residence is far from the trade site and sale their goods/commodity in the night. This condition because the transportation cost was high.
- c. *Site condition.* PKL will choose a strategic area with some benefits. The strategic area will nominated by PKL especially with mix use function
- d. *There is a correlation between land use change and PKL distribution since 2007 until now at Tampan sub-district Pekanbaru.* However, there was not PKL before 2007 in the sub district.
- e. Roadside area is an open space in front of the shops. So, the area will be an interest site. As a part of urban facilities, the open space, parking lot and pedestrian/trottoar/sidewalk among main street and shops should be set by local government to prevent and manage all PKL.

In this study, we make a conclusion that an area with mix use zone like commercial area, residential, education area, and offices have some benefit for economic activities especially for informal sectors. So, PKL or street vendors will choose the area for their activities.

5. SUGGESTIONS

- a. It's better if the government can be set in the spatial plan and provide a residential area for street vendors such as: apartment or rental houses.
- b. The location of apartment or rental houses is near to the trade site for PKL (street vendors)
- c. The mechanism of the rent should be help them with easier way for low income communities

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