

# UNDERSTANDING THE TERRITORIALITY IN MARGINALIZED NEIGHBORHOODS FROM OCCUPANTS' POINT OF VIEW SPECIAL REFERENCE TO SAMMANTHRANAPURA, MATTAKKULIYA

Gehan Athukorala\*, Janaka Wijesundara

Department of Architecture, University of Moratuwa, Sri Lanka

## Abstract

*The way territoriality is used and communicated can be varied from each other's such as one person to other person, one culture to other culture. In an urban setting territoriality always plays a vital role to demarcate and communicate the appropriations. In rural areas, individual territoriality is the most prominent feature that people use to communicate their ownership. But when it comes to urban marginalized neighborhoods, that prominence changes from individual territoriality to group territoriality. Because territoriality is not just a strategy for marginalized people which shows the ownership.*

*This research has explored how marginalized people generate territorial boundaries within their well-connected social neighborhoods and why it is that much important to them, from occupants' point of view. Both personal observations and individual questionnaires are used methodologically to gather relevant data to understand occupant's perception about territoriality. Except those primary data collection tools, activity maps and interviews also have been done. Finally, at the end, all the data collected under the three tendencies (classification, communication and control) were analyzed together.*

*Research data and observations will support government agencies and architects who involves in designing new settlements for low income marginalized groups. Because these people are very sensitive with the social values which they have upheld from their previous neighborhoods. If the designer is clever enough to add those values in to the new housing settlement as appropriate, it will be a successive design. So, this research will help to understand territoriality in their neighborhoods.*

**Key words:** *Marginalized neighborhood, Territoriality, Human behaviours, Occupants' perception, Clustering*

---

\*Corresponding Author: Gehan Athukorala; E-mail- a.d.gehan@gmail.com

## Introduction

The meaning of 'Territory', 'Territoriality' and 'Territorialism' is far beyond than defining it as the ownership or private property, because it has blown out into a broader area. Sometimes it is difficult to understand where the term 'territoriality' is not affected. However, it has various explanations and definitions in different kind of subject areas like political, economic, cultural, social, urban, geographical, etc. Basically, territoriality is understood as the area that an animal or a group of animals feel(s) free, comfortable and secure.

Furthermore, when we call an area as 'here', the other area autonomously becomes 'there', that means where consider as 'here' is 'our territory' (Madanipour, 2003). In our context, urban neighborhoods are the best places to study about these territorial segregations and its characteristics. Neighborhood is an intangible quality which can see in same social groups and which have good interaction among its members. But in a single neighborhood there can be deferent territories, sometimes due to social hierarchy causing a social segregation.

Study area of this research is limited to the urban neighborhoods which are marginalized from the society because of poverty. Marginalized communities are the group which is socially excluded from the general society and mostly living in temporary built structures made out of non-durable materials and may be in legally unauthenticated lands, well known as shanty communities or urban low-income groups. So, when comparing with other income level community settlements, these urban poor neighborhoods have their own territorial characteristics. Those territorial characteristics help them to survive themselves and survive their neighborhood region within the city (Suttle, 1968).

## Need of the study

Every government takes lots of actions to enhance these people's life style and resettle them in new housing schemes. But the problem is, are those programs rich enough to handle or provide good housing solutions for these marginalized people? Because many of those housing programs belongs to the category of failure projects. Most reasonable answer for that is lack of understanding of social, economic and physical behaviors and characteristics of these people maintain in their present neighborhoods. So, there are few factors which have to be carefully understood regarding these people. Among those factors territoriality is just a one spatial and physical characteristic, but it is a very important factor which they have maintained to survive in the city.

**Research problem** – Explore, how marginalized people generate territorial boundaries within their well-connected social neighborhoods and its importance to them, from occupants' point of view

## Marginalized neighborhoods

Marginalization is not a new experience to all human kinds. Because there are lots of evidences which show marginalization happen from the very beginning of human race. Best example is Mohandajaro-Harappa civilization. According to the archaeologists, there were two parts in the city called inner city and outer city. Only the wealthy people lived in inner city and other low

cast relatively poor people lived in outer city. In that period cast was the major reason for create marginalized neighborhoods but in the present era there are more than one reason to create marginalized neighborhood.

Socially excluded groups of people for different reasons, such as age, physical or mental disabilities, economic status, access to education, or live in isolated places or depressed areas.

(Morato J., Robles R. A. & Marzal M. A., 2015, p. 351)

This situation is common to even richest countries. Best example for that is Canada Real shanty town in Madrid, Spain (Fig. 1). Writers mention it as slums of shame. It is home to over 30,000 people and extend over 16 km length, 75m width strip. These people marginalized by city because of their poor economy and social misery.



**Fig.3:** RealGaliana shanty town in Madrid,Spain  
Source: [www.teinteresa.es](http://www.teinteresa.es)



**Fig. 4:** The 'Wall of Shame' in Lima, Peru  
Source: <http://citiscopes.org>

Socially, economically or culturally excluded groups naturally cluster away from the general city neighborhoods because of their own protection using natural barriers like canals, railway lines or dangerous places where others reluctant to enter. But even in the 21<sup>st</sup> century there are some massive neighborhoods in cities which are socially marginalized by human made barriers. The best example for that is wall in Peru which divided Las Casuarinas one of the richest neighborhood and nearby area Pamplona Alta one of poorest neighborhood in Lima (Fig.2). This three-meter high six miles long concrete wall with a barbed wire on the top has built in 1985 by the wealthy side. People who live in poor side takes more than one hour to reach other side because of this wall. Because of this social inequality and marginalization this wall famous as 'wall of shame'

### **Poverty & Marginalized neighborhoods in Srilanka**

As a developing Asian country, Srilanka also maintains urban marginalized neighborhoods. Poverty is the main reason for these people to be marginalized from other neighborhoods. Basic idea of poverty is ability to consume minimum capacity of their needs and ability to participate in an effective manner to the society (UN). Srilanka the urban sector takes 5.3% of poverty rate among the 8.9% of national rate of below poverty line (Rathnayake, 2014). Among the other cities, Colombo metropolitan area is well known for the prevalent of urban poverty.

People who are not capable to access above mentioned facilities mostly belongs to low income group. Because of their inability to reach good housing, sanitation and etc. these people marginalized from others and they gathered as a cluster for their security. Officially these neighborhoods consider as 'Row houses", but in local term people called 'mudukku', 'palpath',

or 'wattta'. In English they are classified as shanties or slums. **Slums**- Compactly oriented as back to back row houses, built using permanent materials and locally called Mudukku.

### **Definition of Territoriality**

According to the famous cross-cultural researcher and anthropologist Edward T. Hall (1969) territoriality can be defined as behaviors and strategies which organism use to appropriate an area using intangible or tangible boundaries and defend it from its own species. But the term of territorial boundaries does not mean simply the fences or walls. There are more advanced and psychologically influenced spatial strategies which maintain by all the creatures in the world to appropriate, demarcation and defend their area. As well this term has taken more depth and broader scope on different phenomena such as country region to someone's favorable table in a public space. However, territoriality is not limited to human being. It is a universal factor common to all the animals including human.

### **Territoriality as a need of human beings**

Human territories have defined by few authors according to their subject areas such as sociologists, psychologist. Among them Leon A. Pastalan (1970) was special character who defines territoriality of human being because he was an Architect and Urban planner also. According to him human territoriality is

"...a delimited space that a person or a group used and defends as an exclusive preserve. It involves psychological identification with a place, symbolized by attitudes of possessiveness and arrangements of objects in the area"

Pastalan, 1970

Basically, human beings try to maintain their territory engaging the built environment and restricted access to the area. When comparing territorial behavior of humans and animals there are major differences. Animals use territoriality to fulfill the basic psychological needs to survive themselves from others but in a more natural way. Because those territorial behaviors come from their hereditary. But human territoriality is more complex and extends into a broader scale of maintaining their identity, privacy, status, security and achievement of their self-image. Because human territorial behavior is not based on the hereditary, it is based on their cultural training (Brower, 1980). According to that general purpose of human territory converted from psychological needs to social interaction (Altman, 1975). Special segregation makes it possible to generate different boundaries for deferent uses and that process helps to reduce conflicts between people.

There are two general approaches when defining human territoriality. First approach focusses on the territoriality of individuals and groups and their marks, defends or personalization territory (Altman, 1975). Second approach is based on human and political geography. It focuses on international strategies of power, administrative and spatial influence in societies (Sack, 1986). From these two, first approach is selected for this research considering its compatibility with the research objective.

### Territorial categorization in-terms of neighborhood

Most of the authors and philosophers who have discussed about human territoriality, introduced deferent categorizations of territories with focus to the neighborhoods. Among them Robert David Sack, Altman, Sidney Brower play prominent roles. Common factors that can be seen in these categories are, all of them based on physical qualities of the neighborhood and because of that all of them look similar. As well those categories have been developed considering European or American neighborhood contexts. But when it is applied to the Srilankan context, especially to the low-income neighborhoods, it has to change some parameters considering their social life.

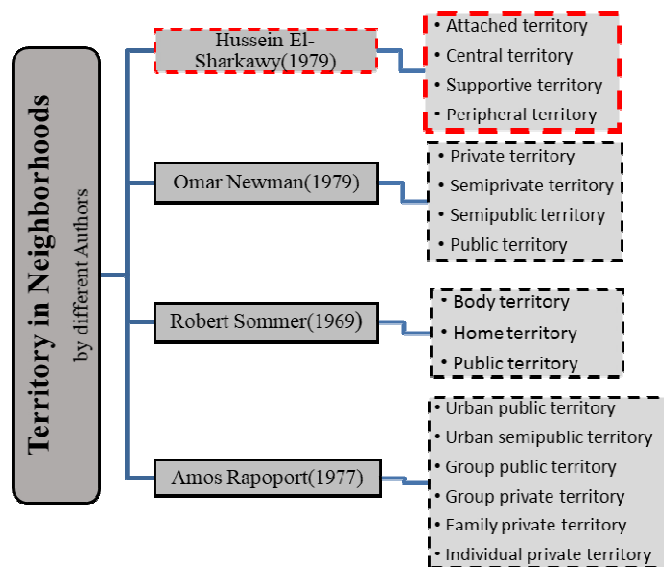


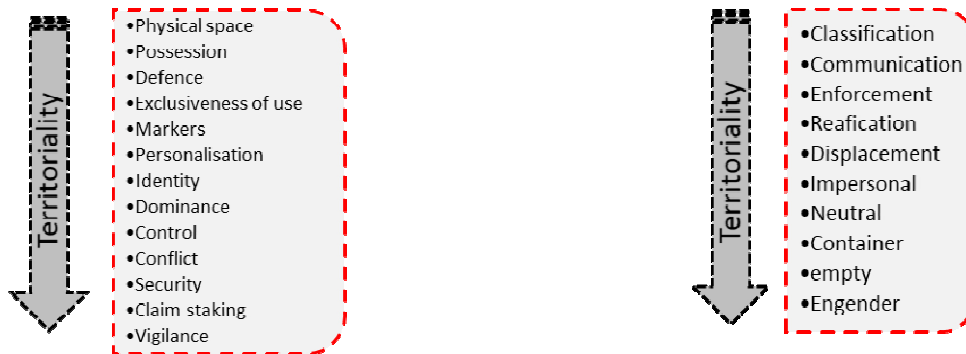
Fig. 5: Territorial categorizations by deferent authors  
 Source: Author

All of these categories are seeming similar to each other though they have slight differences. But for the further clarifications and to proceed with the research, categorization which was introduced by architect Hussein El-Sharkawy (1979) adopted with considering its compatibility to the low-income settlements.

### Tendencies of territoriality in marginalized neighborhoods

Achievements of territoriality, and strategies which use to maintain it, can be varied from one person to another person. According to the Artusi (1996) Human territoriality is a man made and synthetic expression which forms the identity through intangible or tangible ways. That means territoriality and its behaviors that maintain by human beings is a critical mechanism for obtaining private needs. In that case, the process which people follow to reach to a strong territory can be differ according to their physical attributes such as age, gender, skin color etc. and social attributes. Physical attributes will not focus from this research because it is far away from the research area and less relevant to architecture. However, with the rapid urbanization and competitiveness of the world, affection of social attributes and its partitioning to society is on a higher level. It involves badly to create social segregation among the people from various ways such as income level, ethnicity, religion, culture, status and etc.

In that case people start to change the built environment from personalizing the space and through specific activity patterns to meet their needs including security, privacy and identity (Lang, 1987). These three factors can be considered as major production of territoriality. But the degree of above factors varies according to the level of social attributes.



To survive in the society people use different territorial strategies and behaviors. There are few authors who have identified the common strategies of territory.

Fig.6: Edney J. Julion's (2006) introduction

Fig. 7: Robert Sack's (1986) introduction  
 Source: Author

Robert Sack (1986) and Edney J. Julion (2006) have discussed about these factors in common terms. So, there are three highlighted factors from both theories which can be easily identified in low income neighborhoods. Those are classification, communication and control.

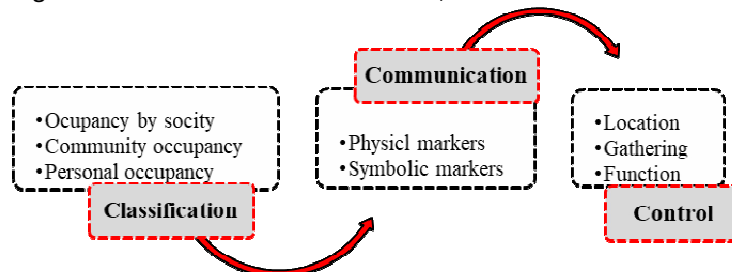


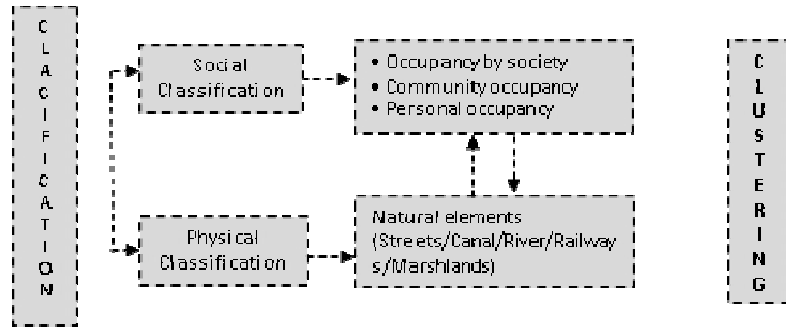
Fig.8: Classification, Communication and Control draft  
 Source: Author

### Classification

People who live in low income human settlements are not capable enough to engage efficiently with the economic activities of the general society. In that case these marginalized people classified from others as economically and socially inactive group. It is the reason to generate more social issues between general city community and marginalized people. So accordingly, that classification is the major component which they use to survive themselves from such social intrusions.

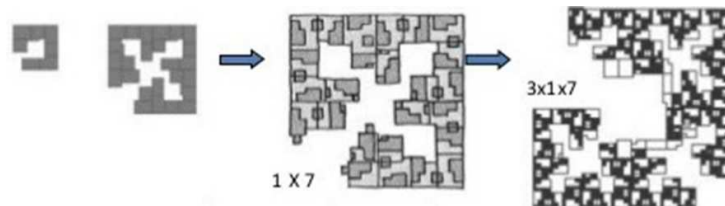
Classification can be divided in to two. First one is 'social classification' which is intangible and second one is 'physical classification' which is tangible. These two factors interrelated to each other and directly affect to create strong territoriality in urban low-income settlements.

However, the last result of this segregation process converts them in to clusters.



**Fig.9:** Classifications in low income neighborhoods in terms of territoriality, draft  
 Source: Author

According to Gottmann (1973) the main reason for the clustering of human settlement is 'ensure their security'. Furthermore, he clarified it under two purposes. Prime purpose is protection against outsiders. Second purpose is control the access of outsiders while giving great accessibility to own group members to their territory.



**Fig.10:** Formation of clusters in Belapur Incremental Housing by Charles Correa  
 Source: The new landscape, Charles Correa (1985)

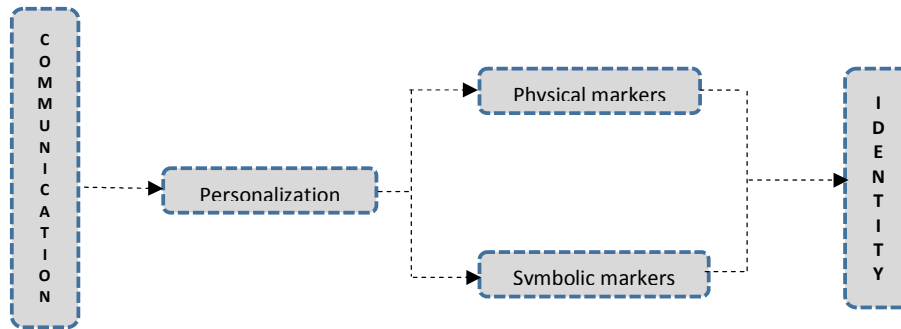
## Communication

Communication of information is essential for the establishment of group's standards and norms for controlling and structuring the form of social order and territorial behavior Skaburskis (1974).

Personalization is the primary function of communication in terms of territoriality in low income neighborhoods. The successiveness of communication depends on the level of personalization which these people have adopted individually or as a group. Personalization of a space is not only about the something that delivers a message of possession. Sometimes personalization acts as a mirror of itself. Sometimes it can use to fear someone and sometime it can use to attract someone.

"The territorial boundary may be the only symbolic form that combines direction in space and a statement about possession or exclusion."  
 (Sack, 1986)





**Fig.11:** Communication in low income neighborhoods in terms of territoriality, draft  
Source: Author

Finally, with the combination of all of these factors these people try to make their own identity in their neighborhood (Edney J. J., 2006). The way they gain that identity is more aesthetic and much more successful than the designs what professional do (Rapoport A., 1988). In that case home is the best symbol of privacy. It does not matter how much those houses are built closer to each other if they enhance the self-esteem / territoriality/ ownership and privacy. However according to Sack (1986) simplicity and easiness of communicate the territory is the reason why humans use it very often and be close to them.

## Control

“Territoriality can be the most efficient strategy for enforcing control” (Sack, 1986)

In any human settlement or neighborhood environment, controllability is a predominant feature which helps to attach its people together and ensure their security. In a village situation their informal control point form by people themselves. That is the ‘bazaar’. It collects all the people of village together. In that case the retail shop is the reason why people usually come to that particular place. So, owner of the retail shop knows all the gossips of the village and he is always vigilance about the surrounding.

When it comes to urban marginalized neighborhood situation, control points can be market place, somewhere in alley ways or somewhere under the shaded tree. But they do not see it as their control point, to them it is just a public place which they use to gather. But it unconsciously acts as a control point. These people use this control points both for pragmatic activities and social activities.

There are three functions of good public space (Ghel J., 1996). They are market place, meeting place and Thoroughfare. When it considers these three factors in low income neighborhood it can be defined as follows.

**Market place-** their market place can be a single stall or a retail shop which they use to fulfill their day to day needs for their survival

**Meeting place-** in these neighborhoods meeting places develop based on the shade. Mostly under the natural shade. And they personalize that place with adding benches and etc.

**Thoroughfare-** for this they mostly use alley ways which are privatized to their social group



But the strategies can be varied accordingly to the social type as an ex. Archt: Charles Correagave court yard space for every seven houses in his Belapur incremental housing project. That is their control point. With the combination of few seven housing clusters he gave another large-scale courtyard place which common to all. It was very successful strategy to secure their territory.



**Fig.12:**Court yards as control points in Belapur incremental housing by Charles Correa in 1983  
Source: The new landscape, Charles Correa (1985)

## Methodology

Territoriality is not always bound with physical environment as well it does not always depend on the physical environment because territoriality acts as both tangible and intangible manners. Sometimes it depends on social values, cultural values and human behaviors in territory generation process. When it comes to urban poor or marginalized neighborhood, there are more things to understand rather than other contexts, because these groups have very specific and unique characters which affect to generate territories. So, for a better research, first it is a must to understand both physical qualities what they maintain in their neighborhoods like boundaries, markers, functions and psychological qualities like sense of defense, sense of belongingness, sense of enclosure etc. So, to identify the interactions between those factors and territoriality, it has to follow both quantitative and qualitative methods to gather relevant data. Using research tools such as questionnaires, interviews, direct observations, photographic surveys, checklists, activity maps and time laps it have to identify socio-spatial relationship, formation of territories and level of territoriality. The questions in the questionnaire have been discussed with the occupants and been recorded manually by written.

**Step 1:** Study about the key terms of research through a literature survey and observe how people create their territories in busy urban settings and their gaining through that.

**Step 2:** Understand the physical and psychological characters of low income marginalized neighborhoods in Colombo through a pilot survey. Through this survey Wanathamulla, Kotahena and Mattakkuliya low income housing settlements were covered.

**Step 3:** Identify the area which is most suitable to follow the facts filtered from literature survey and make sure will that area provide enough support and convenience to the research.

**Step 4:** 'Classification' is an important factor of territoriality. How do the people divide their territories and why it is important to them? To understand it, have to gather information about ethnicity, religious background, number of houses, amount of income level, nature of carrier, amount of family members, age differences and how many houses were there in the beginning of selective case study area. And then through maps and direct observation, identify their demarcations of clustering and specific characters of housing clusters.

**Step 5:** Through this try to understand physical and psychological boundaries or strategies these people use to communicate their individual appropriations and group territories to others as

well how it's important to them. Under that, identify the amount of symbolic and real barriers in a number of alley ways and then take them into charts. Types of the barriers they have used, how they have personalized their supportive territory and central territory are considered. After that, the examination of the reason of using those barriers through questionnaire.

**Step 6:** Controllability is an intangible factor what these people create unconsciously through their interaction. It always helps them to survive in the city. To identify 'control spaces' of each cluster, use mind maps and direct observations. After that, identify its socio-spatial characters and how it affects to form the neighborhood through questionnaires and observations.

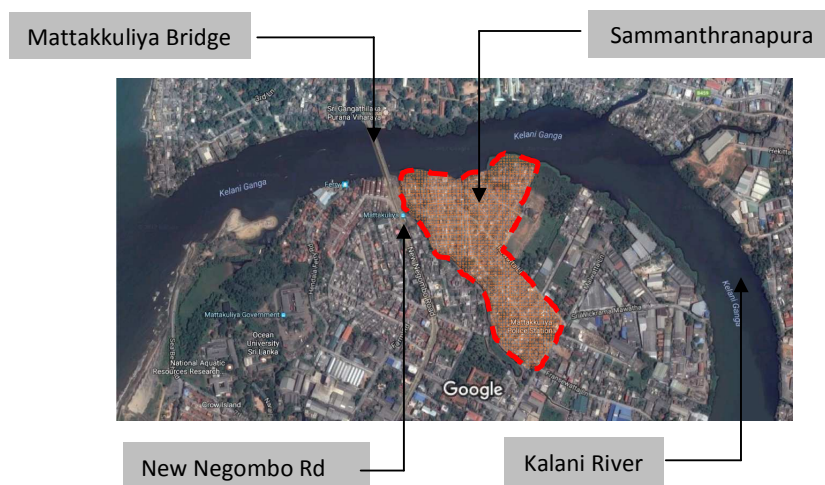
**Step 7:** Analyze all the data which collected from surveys and direct observations about the classification, communication and control.

**Step 8:** Conclude the research presenting research findings and outcomes.

### Introduction of case study

Mattakkuliya is famous as an adjoining area to Colombo port and final destination point of river Kelani. But generally, Mattakkuliya area is famous for plenty of low income housing settlements in Colombo district. As well has highly mixed population according to their ethnicity and religion.

The selected case study area called "**Sammanthranapura**" which is considered as a low income marginalized neighborhood and covered its north from Kelani River, west from a decayed canal, south from Sri Wickrama Mawatha, and east from Rawatta Lane and a wet land.



**Fig.13:** Location of Sammanthranapura in Mattakkuliya  
Source: Google map



**Fig. 14:**General characters of Sammanthranapura  
Source: Author



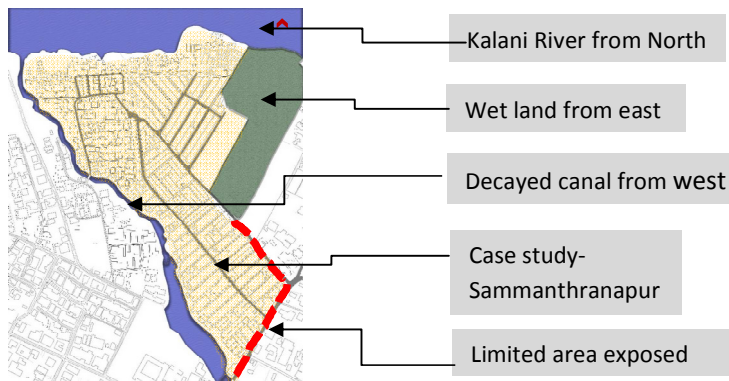
**Fig. 15:**General characters of Sammanthranapura  
Source: Author

### Classification

Territorial classification or clustering can be seen in marginalized neighborhoods in both macro and micro level. Selected case study also contains both of them. In macro level Sammanthranapura marginalized neighborhood consider as one society, but in that main cluster there are four sub clusters which apart from each other's for deferent reasons.

### Occupancy by Society

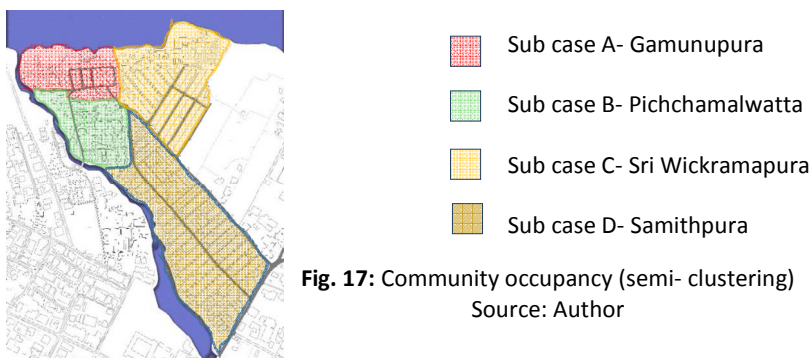
Case study area is clustered as a one society in Mattakkuliya area. They have used natural barriers as much as possible to set their territory apart from other societies. Because as low-income group it is one of their identified territorial character, settle in an area where covered by natural barriers and which other people reluctant to enter. It is more essential for them to survive in the city. 'Sammanthranapura' low income settlement covered from three sides by natural setting. North portion detaches from Kelani River, west side detaches from a decayed canal, half of east side covers by a wet land and limited area is exposed to the general city.



**Fig.16:** Natural barriers create societal territory  
Source: Author

### Community occupancy as supportive territory

There are four semi clusters in Sammanthranapura area which are called Gamunupura, Pichchamalwatta, Samaithpura and Sri Wickramapura. According to the older people in this area, there were no semi clusters here few decades back. Nonetheless there were certain segregations among the people as groups but in very informal manner. With the development of the inner road network of the area these people fortified their territories and converted them in to clusters by the name of the nearby road names ex. from Pichchamalwatta road – Pichchamalwatta cluster began. After that process, these people have used different territorial strategies to reinforce their clusters as supportive territories. For the ease of study and for the ease of comparative analysis these four clusters will consider as sub case studies in the main case study area.



**Fig. 17:** Community occupancy (semi- clustering)  
 Source: Author

**Table 2:** Occupancy Perception about their cluster  
 Source: Author

| Questions   | Answers      | Gamunupura             |                        |                        |                        |                        | Pichchamalwatta        |                        |                        |                        |                        | Sriwickramapura        |                        |                        |                        |                        | Samithpura             |                        |                        |                        |                        |                        |  |
|---|--------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--|
|   |              | 1 <sup>st</sup> person | 2 <sup>nd</sup> person | 3 <sup>rd</sup> person | 4 <sup>th</sup> person | 5 <sup>th</sup> person | 1 <sup>st</sup> person | 2 <sup>nd</sup> person | 3 <sup>rd</sup> person | 4 <sup>th</sup> person | 5 <sup>th</sup> person | 1 <sup>st</sup> person | 2 <sup>nd</sup> person | 3 <sup>rd</sup> person | 4 <sup>th</sup> person | 5 <sup>th</sup> person | 1 <sup>st</sup> person | 2 <sup>nd</sup> person | 3 <sup>rd</sup> person | 4 <sup>th</sup> person | 5 <sup>th</sup> person | 6 <sup>th</sup> person |  |
| 1. How is your connection with other 3 clusters?          | Good         |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |  |
|   | Average      | •                      |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |  |
|   | Bad          |                        | •                      | •                      | •                      |                        |                        | •                      | •                      |                        |                        | •                      | •                      | •                      | •                      | •                      |                        |                        |                        |                        |                        |                        |  |
| 2. Infrastructures of this cluster?                       | Good         | •                      |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |  |
|   | Bad          |                        | •                      | •                      | •                      | •                      |                        | •                      | •                      |                        |                        | •                      | •                      | •                      | •                      | •                      |                        |                        |                        |                        |                        |                        |  |
| 3. Human behaviors of this cluster relative to others?    | Good         | •                      | •                      | •                      | •                      |                        |                        | •                      | •                      |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |  |
|   | Average      |                        | •                      |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |  |
|   | Bad          |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |  |
| 4. How is your privacy in this cluster?                   | Good         | •                      |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |  |
|   | Average      |                        | •                      | •                      |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |  |
|   | Bad          |                        | •                      |                        | •                      |                        |                        |                        | •                      |                        |                        |                        |                        | •                      | •                      |                        |                        |                        |                        |                        |                        |                        |  |
| 5. Do you feel safe hear?                                 | Yes          | •                      | •                      | •                      | •                      |                        |                        | •                      | •                      |                        |                        | •                      | •                      | •                      | •                      |                        |                        |                        |                        |                        |                        |                        |  |
|   | No           |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |  |
| 6. Can the girls going around after 6p.m in this cluster? | yes          | •                      | •                      | •                      | •                      | •                      |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |  |
|   | no           |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |  |
| 7. Why you want to live in this cluster?                  | Cousins here |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |  |
|   | feels ours   | •                      |                        | •                      |                        | •                      |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |  |
|   | Don't want   |                        | •                      | •                      | •                      |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |  |

### Personal occupancy as central territory

There are number of personal occupancies as central territories available in all the community occupied clusters in Sammanthranapura. With the experience of pilot studies which was done in 'Kotahena' and 'Wanathamulla' low income settlements proves how much these people engage with these personal occupancies as central territories. It is like a major neighborhood character of low income settlements. Because with their poverty they need each other's help more than other communities to survive in the city. In that case it is better to have intimate relationships with

the immediate neighbors and with the time those relationships among group of people who live closely convert to a central territory. To understand the importance of personal occupancy, one central territory is selected from each four supportive territories and surveyed six persons from each of them.

**Table 3: Occupancy perception about central territory, Gamunupura**  
 Source: Author

| Question                                     | Answer | Gamunupura             |                        |                        |                        |                        |                        | Pichchamalwatta        |                        |                        |                        |                        |                        | Sriwckramapura         |                        |                        |                        |                        |                        | Samithpura             |                        |                        |                        |                        |                        |
|--|--------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|  |        | 1 <sup>st</sup> person | 2 <sup>nd</sup> person | 3 <sup>rd</sup> person | 4 <sup>th</sup> person | 5 <sup>th</sup> person | 6 <sup>th</sup> person | 1 <sup>st</sup> person | 2 <sup>nd</sup> person | 3 <sup>rd</sup> person | 4 <sup>th</sup> person | 5 <sup>th</sup> person | 6 <sup>th</sup> person | 1 <sup>st</sup> person | 2 <sup>nd</sup> person | 3 <sup>rd</sup> person | 4 <sup>th</sup> person | 5 <sup>th</sup> person | 6 <sup>th</sup> person | 1 <sup>st</sup> person | 2 <sup>nd</sup> person | 3 <sup>rd</sup> person | 4 <sup>th</sup> person | 5 <sup>th</sup> person | 6 <sup>th</sup> person |
| 1 Do you satisfy with neighbors?             | Yes    | ●                      | ●                      |                        |                        | ●                      | ●                      |                        |                        |                        |                        | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      |
|  | No     |                        | ●                      | ●                      | ●                      |                        |                        | ●                      | ●                      | ●                      | ●                      |                        |                        |                        |                        |                        |                        | ●                      |                        |                        | ●                      |                        |                        | ●                      | ●                      |
| 2 Do you participate to activities together? | Yes    | ●                      |                        | ●                      |                        | ●                      |                        |                        |                        | ●                      |                        |                        | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      |
|  | No     |                        | ●                      |                        | ●                      | ●                      |                        | ●                      | ●                      | ●                      |                        | ●                      | ●                      |                        |                        |                        |                        | ●                      |                        | ●                      | ●                      |                        |                        | ●                      | ●                      |
| 3 Mutual concern for each other?             | Good   | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      |                        |                        | ●                      |                        | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      |
|  | Bad    |                        |                        |                        |                        |                        |                        | ●                      | ●                      |                        | ●                      |                        |                        |                        |                        |                        |                        | ●                      |                        | ●                      | ●                      |                        |                        | ●                      | ●                      |
| 4 Providing assistant during emergency?      | Yes    | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      | ●                      |
|  | No     |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |

## Analysis

According to the Table 01, 58% of people say girls cannot go around the cluster after 6 p.m., 70% says they are not satisfy with infrastructure facilities, 41% says they have bad privacy, 41% says they have average privacy and only 17% says they have good privacy here. But from them 67% says they feel safe here and 50% says it feels as ours even most of them having such social and general issues in their clusters. According to them if they live outside from the cluster as a single family or separate from same income level groups, they have to face lots of problems more than that. That is why they feel safe and ownership here.

Direct observations show how alleyways are important to create powerful central territory. If there are less alley ways that means less central territories. As an example, in Samithpura, alleyways spread like a spider web, because of that there are plenty of central territories which fortify mutual connection of each other even as a one supportive territory. But in Pichchamalwatta it has wider direct roads, and it affects to create less central territories and less mutual interaction among those people. As well in supportive territories there is less affect from cultural and religion factors but when it comes to central territories those factors directly and in directly affect to create central territories. Because through the observation it was identified some of these people prefer to gather according to their ethnicity in central territory.

## Communication

Communication is the way how people maintain and demarcate their appropriations and territoriality. For that they have used their own ways. Strategies what these people use to communicate their territory, sometimes play with human's psychological comfort levels. Because if someone is new to the area, he or she think twice to enter their supportive territories and he or she will think several times before enter their central territories.



**Table 4: Level of personalization**

| Question                          | Gamunupura |          |          |          |          | Pichchamalwatta |          |          |          |          | Sri Wickramapura |          |          |          |          | Samithpura |          |          |          |          |          |          |          |          |          |          |          |          |          |          |   |
|-----------------------------------|------------|----------|----------|----------|----------|-----------------|----------|----------|----------|----------|------------------|----------|----------|----------|----------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---|
|                                   | Gamunupura |          |          |          |          | Pichchamalwatta |          |          |          |          | Sri Wickramapura |          |          |          |          | Samithpura |          |          |          |          |          |          |          |          |          |          |          |          |          |          |   |
|                                   | House 01   | House 02 | House 03 | House 04 | House 05 | House 06        | House 07 | House 08 | House 09 | House 10 | House 01         | House 02 | House 03 | House 04 | House 05 | House 06   | House 07 | House 08 | House 09 | House 10 | House 01 | House 02 | House 03 | House 04 | House 05 | House 06 | House 07 | House 08 | House 09 | House 10 |   |
| 1. To improving self-image        |            |          |          |          |          |                 |          |          |          |          | •                | •        | •        |          |          |            |          |          |          |          |          | •        | •        |          |          |          |          |          |          | •        | • |
| 2. To ensure ownership            |            |          |          |          |          |                 |          |          |          |          | •                | •        | •        |          |          |            |          |          |          |          |          | •        | •        |          |          |          |          |          |          | •        | • |
| 3. To increase usable space       |            |          |          |          |          |                 |          |          |          |          |                  |          |          |          |          |            |          |          |          |          |          |          |          |          |          |          |          |          |          |          |   |
| 4. improving security/privacy     | •          | •        | •        | •        | •        | •               | •        | •        | •        | •        | •                | •        | •        | •        | •        | •          | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | • |
| 5. For aesthetically pleasure     |            | •        |          |          | •        |                 | •        |          | •        |          | •                |          | •        |          | •        |            | •        |          | •        |          | •        |          | •        |          | •        |          | •        |          | •        |          | • |
| 6. To facilitate other activities |            |          |          |          |          |                 |          |          |          |          | •                | •        | •        | •        | •        | •          | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | • |
| 7. Positive impression of guest   |            | •        |          |          |          |                 |          |          |          |          | •                | •        | •        |          |          |            |          |          |          |          |          | •        | •        | •        |          |          |          |          |          |          | • |
| Fence                             |            | •        |          |          |          |                 |          |          |          |          |                  |          |          |          |          |            |          |          |          |          |          |          |          |          |          |          |          |          |          |          |   |
| furniture                         |            |          | •        |          |          |                 |          |          |          |          |                  |          |          |          |          |            |          |          |          |          |          |          |          |          |          |          |          |          |          |          |   |
| Potted plant                      |            |          |          | •        |          |                 |          | •        |          |          |                  |          |          |          |          |            |          |          |          |          |          |          |          |          |          |          |          |          |          |          |   |
| Sense of enclosure                | •          | •        | •        | •        | •        | •               | •        | •        | •        | •        | •                | •        | •        | •        | •        | •          | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | • |
| Permeability                      | •          | •        | •        | •        | •        | •               | •        | •        | •        | •        | •                | •        | •        | •        | •        | •          | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | • |
| Colors                            | •          | •        | •        | •        | •        | •               | •        | •        | •        | •        | •                | •        | •        | •        | •        | •          | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | • |
| Sign boards                       | •          | •        | •        | •        | •        | •               | •        | •        | •        | •        | •                | •        | •        | •        | •        | •          | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | • |
| Material change                   |            |          |          | •        | •        | •               | •        |          |          | •        |                  |          |          |          |          |            |          |          |          |          |          |          |          |          |          |          |          |          |          |          |   |

Source: Author

**Table 5: Need of personalization, occupancy point of view, Gamunupura**

Source: Author

| Question                          | Gamunupura |          |          |          |          | Pichchamalwatta |          |          |          |          | Sri Wickramapura |          |          |          |          | Samithpura |          |          |          |          |          |          |          |          |          |          |          |          |          |          |   |
|-----------------------------------|------------|----------|----------|----------|----------|-----------------|----------|----------|----------|----------|------------------|----------|----------|----------|----------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---|
|                                   | Gamunupura |          |          |          |          | Pichchamalwatta |          |          |          |          | Sri Wickramapura |          |          |          |          | Samithpura |          |          |          |          |          |          |          |          |          |          |          |          |          |          |   |
|                                   | House 01   | House 02 | House 03 | House 04 | House 05 | House 06        | House 07 | House 08 | House 09 | House 10 | House 01         | House 02 | House 03 | House 04 | House 05 | House 06   | House 07 | House 08 | House 09 | House 10 | House 01 | House 02 | House 03 | House 04 | House 05 | House 06 | House 07 | House 08 | House 09 | House 10 |   |
| 1. To improving self-image        |            |          |          |          |          |                 |          |          |          |          | •                | •        | •        |          |          |            |          |          |          |          |          | •        | •        |          |          |          |          |          |          | •        | • |
| 2. To ensure ownership            |            |          |          |          |          |                 |          |          |          |          | •                | •        | •        |          |          |            |          |          |          |          |          | •        | •        |          |          |          |          |          |          | •        | • |
| 3. To increase usable space       |            |          |          |          |          |                 |          |          |          |          |                  |          |          |          |          |            |          |          |          |          |          |          |          |          |          |          |          |          |          |          |   |
| 4. improving security/privacy     | •          | •        | •        | •        | •        | •               | •        | •        | •        | •        | •                | •        | •        | •        | •        | •          | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | • |
| 5. For aesthetically pleasure     |            | •        |          |          | •        |                 | •        |          | •        |          | •                |          | •        |          | •        |            | •        |          | •        |          | •        |          | •        |          | •        |          | •        |          | •        |          | • |
| 6. To facilitate other activities |            |          |          |          |          |                 |          |          |          |          | •                | •        | •        | •        | •        | •          | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | •        | • |
| 7. Positive impression of guest   |            |          |          | •        |          |                 |          |          |          |          | •                | •        | •        |          |          |            |          |          |          |          |          | •        | •        | •        |          |          |          |          |          |          | • |

**Analysis**

It seems to be that they have not generated some of these territorial barriers deliberately. When they try to fulfill their needs, most of those barriers have been generated autonomously. As an example, people who have small individual plot coverage, always try to expand their indoor space, to gain that what they do is extend their inner walls until they meet the boundary line and add few steps and eves to outside ensuring their territory with appropriating part of alleyway for their personal needs. Furthermore, because of less space, common alley ways are not much wider. In that case their houses alongside the alleyways are very close to each other and it makes sense of enclosure and gloomy effect throughout the day. It makes the feeling safer to occupant while creating fear in stranger's mind.

Personalization is not always limited to the households. These people use markers even for the central territories to communicate their membership and specialized their occupancy as a group. As an example, below image shows how they try to communicate their membership to the central territory.



Fig.18: use of same ornaments to communicate membership in central territory

Source: Author

## Control

Control points in low income human settlements are the places where people use to gather or interact with other members of the supportive territory. According to El-Sharkawy (1979) they are the peripheral territories. In these places, there are plenty of human activities happen throughout the day, as well sometimes it acts as both meeting place and market place. Because basically these kinds of spaces originated as combination of commercial activities, natural shadings and close proximity to their supportive territory. With the time, these places unconsciously convert into control places showing their territorial power.

Through the direct observations three main elements were identified that help to reinforce the role of controllability in control points. They are

- Retail shop
- Street (not an alley way)
- Shading

Basically, man who own the retail shop has a good knowledge about the people who live in the supportive territory and he always be careful about the visitors who are new to their territory. Spatial arrangement of the shop is help him in his observations. Because of these reasons he has earned a considerable respect from others and has a commanding power in control point.



**Table 6: Identifying control points and occupancy behavior, Gamunupura& Pichchamalwatta**  
 Source: Author

| Question  | Answers  | Gamunupura             |                        |                        |                        |                        |                        |                        |                        |                        |                         | Pichchamalwatta        |                        |                        |                        |                        |                        |                        |                        |                        |                         |
|---|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|
|   |  | 1 <sup>st</sup> person | 2 <sup>nd</sup> person | 3 <sup>rd</sup> person | 4 <sup>th</sup> person | 5 <sup>th</sup> person | 6 <sup>th</sup> person | 7 <sup>th</sup> person | 8 <sup>th</sup> person | 9 <sup>th</sup> person | 10 <sup>th</sup> person | 1 <sup>st</sup> person | 2 <sup>nd</sup> person | 3 <sup>rd</sup> person | 4 <sup>th</sup> person | 5 <sup>th</sup> person | 6 <sup>th</sup> person | 7 <sup>th</sup> person | 8 <sup>th</sup> person | 9 <sup>th</sup> person | 10 <sup>th</sup> person |
| 1 Gender  | Male   | •                      | •                      |                        | •                      |                        |                        |                        | •                      | •                      | •                       | •                      | •                      | •                      |                        |                        | •                      | •                      |                        | •                      | •                       |
|   | Female   |                        |                        | •                      |                        | •                      | •                      | •                      |                        |                        |                         |                        |                        |                        | •                      | •                      |                        |                        |                        | •                      | •                       |
| 2 Age group   | 1-25 years   | •                      | •                      |                        |                        | •                      | •                      |                        |                        |                        |                         |                        |                        | •                      | •                      |                        |                        |                        |                        |                        |                         |
|   | 25-50 years  |                        |                        | •                      | •                      |                        |                        |                        | •                      | •                      |                         |                        |                        | •                      | •                      |                        |                        |                        | •                      | •                      | •                       |
|   | 50< years  |                        |                        |                        |                        |                        |                        | •                      |                        | •                      |                         | •                      |                        |                        |                        |                        | •                      | •                      |                        |                        |                         |
| 3 Where you use for communal gathering?             | a. Gamunupura- Gamunupura junction<br>b. Pichchamalwatta- no point identified<br>c. Sri Wickramapura- Near play ground<br>d. Samithpura- Near the gas shop | •                      | •                      |                        |                        |                        |                        |                        | •                      | •                      | •                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                         |
|   | Somewhere at the alley way   |                        |                        | •                      | •                      |                        |                        | •                      |                        |                        |                         |                        |                        |                        | •                      | •                      |                        |                        |                        |                        |                         |
|   | No where   |                        |                        |                        |                        | •                      | •                      |                        |                        |                        | •                       | •                      | •                      |                        |                        |                        | •                      | •                      | •                      | •                      | •                       |
| 4 How many times you go to that place within a day? | 1-3 times  |                        |                        | •                      | •                      |                        |                        | •                      |                        |                        |                         |                        |                        | •                      | •                      |                        |                        |                        |                        |                        |                         |
|   | 4-6 times  | •                      | •                      |                        |                        |                        |                        |                        |                        | •                      |                         |                        |                        |                        |                        |                        |                        |                        |                        |                        |                         |
|   | More than 6 times  |                        |                        |                        |                        |                        |                        | •                      | •                      |                        |                         |                        |                        |                        |                        |                        |                        |                        |                        |                        |                         |
| 5 How much time you spent there?                    | Less than 1 hour   |                        |                        | •                      |                        |                        |                        |                        | •                      |                        |                         |                        |                        | •                      | •                      |                        |                        |                        |                        |                        |                         |
|   | 1-3 hours  | •                      | •                      |                        |                        |                        |                        | •                      |                        |                        |                         |                        |                        | •                      | •                      |                        |                        |                        |                        |                        |                         |
|   | 3-5 hours  |                        | •                      |                        |                        |                        |                        |                        |                        | •                      |                         |                        |                        |                        |                        |                        |                        |                        |                        |                        |                         |
|   | More than 5 hours  |                        |                        |                        |                        |                        |                        | •                      |                        |                        |                         |                        |                        |                        |                        |                        |                        |                        |                        |                        |                         |
| 6 Why you prefer to stay there?                     | Feels more Security  |                        |                        |                        |                        |                        |                        |                        |                        | •                      | •                       | •                      |                        |                        |                        |                        |                        |                        |                        |                        |                         |
|   | Feel as ours   | •                      | •                      |                        |                        |                        |                        | •                      | •                      | •                      |                         |                        |                        |                        |                        |                        |                        |                        |                        |                        |                         |
|   | interact with others   | •                      | •                      | •                      | •                      |                        |                        | •                      | •                      | •                      | •                       |                        |                        | •                      | •                      |                        |                        |                        | •                      | •                      | •                       |

**Table 7: Identifying control points and occupancy behavior, Sri wickramapura&Samithpura**  
 Source: Author

| Question  | Answers  | Sri Wickramapura       |                        |                        |                        |                        |                        |                        |                        |                        |                         | Samithpura             |                        |                        |                        |                        |                        |                        |                        |                        |                         |
|---|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|
|   |  | 1 <sup>st</sup> person | 2 <sup>nd</sup> person | 3 <sup>rd</sup> person | 4 <sup>th</sup> person | 5 <sup>th</sup> person | 6 <sup>th</sup> person | 7 <sup>th</sup> person | 8 <sup>th</sup> person | 9 <sup>th</sup> person | 10 <sup>th</sup> person | 1 <sup>st</sup> person | 2 <sup>nd</sup> person | 3 <sup>rd</sup> person | 4 <sup>th</sup> person | 5 <sup>th</sup> person | 6 <sup>th</sup> person | 7 <sup>th</sup> person | 8 <sup>th</sup> person | 9 <sup>th</sup> person | 10 <sup>th</sup> person |
| 1 Gender  | Male   | •                      | •                      | •                      | •                      |                        |                        |                        |                        | •                      | •                       | •                      | •                      | •                      | •                      | •                      | •                      | •                      | •                      | •                      | •                       |
|   | Female   |                        |                        |                        |                        | •                      | •                      | •                      | •                      |                        |                         | •                      | •                      | •                      | •                      | •                      |                        |                        | •                      | •                      | •                       |
| 2 Age group   | 1-25 years   |                        |                        | •                      | •                      |                        |                        |                        |                        |                        |                         |                        |                        | •                      | •                      | •                      |                        |                        |                        |                        |                         |
|   | 25-50 years  | •                      | •                      | •                      |                        | •                      | •                      | •                      | •                      | •                      | •                       | •                      |                        |                        |                        |                        | •                      |                        |                        | •                      | •                       |
|   | 50< years  |                        |                        |                        | •                      |                        |                        |                        |                        |                        |                         |                        |                        | •                      |                        |                        | •                      | •                      |                        |                        | •                       |
| 3 Where you use for communal gathering?             | a. Gamunupura- Gamunupura junction<br>b. Pichchamalwatta- no point identified<br>c. Sri Wickramapura- Near play ground<br>d. Samithpura- Near the gas shop |                        | •                      | •                      | •                      |                        |                        |                        |                        | •                      | •                       |                        |                        | •                      | •                      | •                      | •                      |                        | •                      | •                      | •                       |
|   | Somewhere at the alley way   | •                      |                        |                        |                        | •                      | •                      | •                      | •                      |                        |                         |                        | •                      | •                      |                        |                        |                        | •                      | •                      |                        | •                       |
|   | No where   |                        |                        |                        |                        |                        |                        |                        |                        |                        |                         |                        |                        |                        |                        |                        |                        |                        |                        |                        |                         |
| 4 How many times you go to that place within a day? | 1-3 times  |                        | •                      | •                      |                        |                        |                        |                        |                        |                        |                         | •                      | •                      | •                      |                        |                        |                        | •                      | •                      | •                      | •                       |
|   | 4-6 times  | •                      | •                      |                        | •                      |                        |                        |                        | •                      | •                      | •                       |                        |                        | •                      |                        | •                      |                        |                        | •                      | •                      | •                       |
|   | More than 6 times  |                        |                        |                        |                        | •                      | •                      | •                      |                        |                        |                         |                        |                        |                        | •                      |                        |                        |                        |                        |                        | •                       |
| 5 How much time you spent there?                    | Less than 1 hour   |                        | •                      | •                      |                        |                        |                        |                        |                        | •                      | •                       | •                      |                        |                        |                        |                        |                        |                        |                        |                        |                         |
|   | 1-3 hours  | •                      | •                      |                        |                        |                        |                        | •                      | •                      | •                      |                         |                        |                        | •                      | •                      |                        |                        |                        |                        |                        |                         |
|   | 3-5 hours  |                        |                        |                        |                        | •                      | •                      |                        |                        |                        |                         |                        |                        |                        | •                      |                        |                        |                        |                        |                        | •                       |
|   | More than 5 hours  |                        |                        |                        |                        |                        |                        |                        |                        |                        |                         |                        |                        |                        | •                      |                        |                        |                        |                        |                        |                         |
| 6 Why you prefer to stay there?                     | Feels more Security  | •                      |                        |                        |                        |                        |                        |                        |                        | •                      | •                       | •                      |                        |                        |                        |                        |                        |                        |                        |                        |                         |
|   | Feel as ours   | •                      | •                      | •                      | •                      | •                      |                        | •                      | •                      | •                      |                         |                        |                        | •                      | •                      |                        |                        |                        | •                      | •                      | •                       |
|   | interact with others   | •                      |                        |                        | •                      | •                      | •                      | •                      | •                      | •                      | •                       |                        |                        | •                      | •                      | •                      | •                      |                        | •                      | •                      | •                       |

## Analysis

If the control point or peripheral territory is weak, it affects to all other sections of the low-income neighborhood. Best example to study that is Pichchamalwatta supportive territory, because they do not have any significant control point. Therefore, it directly and indirectly affects to create different classification and communication strategies. Mainly even as a single cluster their social interaction is very less.

Even in a same supportive territory control point can be changed based on the gender. All the women who contributed to the survey except two teenagers, use alley ways as their gathering points. All the men in the supportive territories have separate points to gather and that points can be considered as primary control points. Except Pichchamalwatta, all the other supportive territories in the case study area have their own control points (peripheral territories) and it is a good sign which shows significance of control points to the supportive territories. But people who use this place do not call it as a 'control point', to them it is just a gathering point. They use it to keep interaction among the people who live in same supportive territory. But when observing the spatial arrangement of these places it is better to introduce them as control points.



Fig.19: Layout of Gamunupura control point

Source: Author

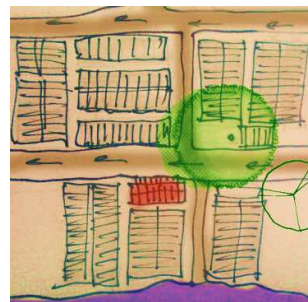


Fig.20: Layout of Samithpura control point

Source: Author

Natural shading of the place is next important and common thing which can be seen in any control point. People who use this place usually, have made temporary seating under the shading to stay comfortably. As well the gloomy effect of that shading is a psychological factor why people prefer to stay here. Furthermore, the strength of a control point always depends on the amount of people stay there and how much time they spend there.

## Conclusion

Poverty is the main reason of why these people marginalized from the cities as urban low-income groups. Because, poverty creates a lot more socio-economic issues when marginalized people try to interact with the general society. Furthermore, poverty forms their living patterns, education, carrier and other social relationships badly. To them it is not an easy task to contribute adequately to the social and economic activities in the general society. In that case they marginalized themselves from the city and general society. General society also refuse and reluctant to interact with marginalized people and they consider them as socially excluded group. But with having that kind of situation, marginalized people have survived themselves from the several of outer forces using some strategies and methodologies. Among them territoriality plays a vital role to ensure their proprietorship within the city.

The Research area has focused to urban low income marginalized neighborhood in Mattakkuliya which is called as "Sammanthranapura". This neighborhood is famous for the laborers as well for the drugs. Most of the people who do labour jobs in Colombo metropolitan are residents of Sammanthranapura. According to the senses and statistic report (2012), 75% of people who live in Sammanthranapura do labour jobs for a daily salary.

Through the research it has explored, how marginalized people generate territorial boundaries within their well-connected social neighborhoods and its importance to them, from an occupants' point of view. During the research was focusing on that, three tendencies were identified from literature survey to study further about the territoriality in marginalized neighborhoods. They are classification, communication and control. These three tendencies are interconnected to each other's. Among them classification can consider as the base point of territoriality in the marginalized neighborhoods. Within Sammanthranapura neighborhood, there are 7,787 people and 1687 house units. These people have classified their neighborhood from the city using natural barriers. But actually, what happen is they have created their neighborhood within existing natural barriers. Now it acts as Sammanthranapura neighborhood cluster. This cluster is protected from the Kelani River in its northern side, decayed canal and marshy land protect it from eastern and western sides. Only the southern part has exposed to the road.

Within the marginalized neighborhood main cluster, there can be few semi clusters which are called as supportive territories. These territories ensure moreover the security, safety and ownership of its group members. In that case the major idea of having supportive territories is creating strong mutual interrelationship and mutual concern among the group members while living as a one major cluster. But according to the data gathered from the surveys and direct observations, sub clustering or having supportive territories cause to make competitiveness between them while eliminating the prime purpose of clustering.

In an urban low income marginalized neighborhood, central territories always play a significant role to create intimate relationship among its members. In any emergency, they are the immediate neighbors who stand for each other. As low income people, they need that mutual concerns more than the others for their survival. Specialty is there is no any competitiveness among the central territories unlike supportive territories.

Personalization is the main strategy that marginalized people use to communicate their territory and ownership. If the communication is weak, automatically their territorial appropriation becomes weak. Communication of territoriality in marginalized neighborhoods can be divided in to two types. First one is group territory communication and second one is individual territory communication. According to the personal observations these people do not prefer to communicate their societal occupancy as one cluster. But they prefer to communicate their ownerships and memberships in supportive territory level and central territory level. In supportive and central territory levels, they mostly use psychological markers such as sense of enclosure, gloomy vicinity to create fear and strange in others' minds especially people who are not inhabitant of the major cluster while greatly welcoming same group members.

Most of the occupants use physical markers to demarcate their individual possession and communicate it to others. But personal observation shows majority of those physical markers have not derived consciously. Most of them are generated unconsciously when they were trying to fulfill their needs.

To strengthen the urban poor marginalized neighborhood territoriality, control points are very important. Strength of control points always depends on the amount of people gather around it

and the time they stay there. Gathering points can vary according to the gender. Most of women use alleyways to gather. But control point is not just a gathering point. It has its own spatial characteristics to become a control point. If the control point is weak that means social interaction of members of supportive territory is less. In that case their unity and security is also relatively weak. But if they have fortified their control points, it gives them additional security and safety.

However, finally all these three factors focus into a one particular output. That is the "security". Security is the prime purpose of having and maintaining all these factors in marginalized neighborhoods. In that case territoriality is just a one methodology that marginalized people use to ensure their security.

Findings of this research will assist architects and designers in designing settlements for urban low-income people. Generally, when people have already adopted a living pattern or some strategies for a considerable period of time, it is difficult to detach those from them. If the designer fails to provide those factors adequately that makes issues and people reluctant to live in there. That is why most of high rise settlements for low incomers failed. In that case this research data will provide basic guidelines about the territorial behaviors, activities as well why they use territoriality, how they use territoriality and why it is important to them. So the understanding of the connectivity of each of these factors will help the designer to choose what should be included or what should be removed from the design.

## References

### **Altman, I. (1975). The environment and social behavior. Monterey: Calif Brooks/Cole.**

- Bhonsle, K. D. (2010). *Thresholds in Architecture. Architecture- time, space & people*, 30-36.
- Brower, S. N. (1980). *Territory in urban setting*. In I. Altman, J. F. Wohlwill, & Rapoport, Culture and environment (pp. 179-207). New York: Plenum.
- Dukhan A., Salenson I., & Chaboche M. (2015). *Integrating Marginalized Neighborhoods into Cities. Tomorrow's Challenge*.
- Edney, J. J. (2006). *Property, Possession and Performance: A Field Study in Human. Applied Social Psychology*.
- El-Sharkawy, H. (1979). *Territoriality: A model for architectural design*. University of Pennsylvania.
- Gold, J. R. (1982). *Territoriality and human spatial behaviour. Progress in Human Geography, Vol 6, Issue 1*, pp. 44 - 67.
- Gottmann, J. (1973). *The significance of territory*. University Press of Virginia.
- Hall, E. T. (1969). *Hidden dimension*. New York: Anchor books.
- Lang, J. (1987). *Creating Architectural Theory: The role of the behavioral sciences in*. New York: Van Nostrand Reinhold Co.
- Madanipour, A. (2003). *Public and Private Spaces of the City*. New York: Routledge Chapman & Hall.
- Ministry of Local Government, Housing and Construction. (1984). *Upgrading Steps, Colombo, Sri Lanka*.
- Morato J., Robles R. A. & Marzal M. A. (2015). *Handbook of Research on Comparative Approaches to the Digital Age Revolution in Europe and the Americas. Passarelli, Brasilia: IGI Global*.
- Pastalan, L. A. (1970). *Privacy as an expression of human territoriality*. In D. Parson, & L. A. pastalan, *Spatial behavior of older people*. University of Michigan.
- Rasmussen, M. I. (2013). *The power of Informal Settlements. The journal of urbanism*.
- Rathnayake, I. (2014). *Urban Poverty In Sri Lanka - 2013. A Centre for Poverty Analysis (CEPA)*.
- Sack, R. D. (1986). *Human Territoriality: Its Theory and History*. London : CUP Archive.
- Sevanatha. (2013). *Urban Slums Reports: The case of Colombo, Sri Lanka*.
- Suttie, G. (1968). *The social order of the slum: ethnicity and territory in the inner city*. Chicago: Chicago university press.