PLACEMAKING IN INFORMAL PUBLIC SPACES: A STUDY OF FUNCTIONALITY AND LIVABILITY IN THE LOW-INCOME SETTLEMENT AT SEDAWATHTHA,KELANIYA

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Abstract

Rapid urbanization has created low-income settlements in developing countries in all parts of the globe. The informal public spaces arean important and essential component of these settlements. They are strongly connected to the life patterns and needs of the occupants. The organically evolved informal spaces are functional, active and lively. It is seen that designed public landscaped spaces of newly constructed high-rise apartment complexes for the low-income lack a vibrant environment. Under such circumstances the users abandon such spaces. Functional landscaped spaces affect the quality of the life of the people as well as the strength of the urban fabric.

Many scholars have contributed to the development ofplacemakingtheory, which explains how built environment is converted toplaces, which works exceptionally well with the users.

This research investigates the issue of placemaking in reference to functionality and livability of the informal public spaces in low- income settlement. Placemaking helps people to collectively reimagine and reinvent public spaces as the heart of the community. Emphasizing theconnectionbetween people and the spaces, placemaking refers to a collaborative process by which the public realm can be shaped in order to maximize shared values. Accordingto the theoretical analysis of placemaking, places should possess qualitiessuch as mixed use (sociability), Accessand linkages, flexible and hybridity, self-satisfaction, comfort and safety.

The outcome of the research explains how the informal public spaces of the low – income settlement havebecome livable and functional due to the strong connection to placemaking.

Keywords: low-income settlement, informal public spaces, functionality, livability, Placemaking.

1.0 Introduction

Across the globe, towns and cities have become congested due to overpopulation. Slums and shanties have emerged in the cities of the developing world. People who live in the slums and the shanties celebrate their daily life activities in the informal spaces within the residential environment. Functionality and the livability of those spaces have given vibrancy to the image of the neighborhood and the city. In addition, the informal spaces strengthen the urban fabric. The informal spaces have both positive andnegative qualities.Nevertheless Place is understood broadly as spaces that people are attached to or 'meaningful location' (Cresswell, 2004:7.)In recent past, human geographers have suggested that, it has become axiomatic that as people construct place, place construct people (Holloway & Hubbard, 2001:7).

Informal public spaces enhance the urbanfabric, as it is a place, which creates activities. The placemaking within the city livens up its character and enhances the structure of the city. The low -income settlements as well as informal spaces are very vibrant areas but the low- income apartment landscape designs do not function like those informal spaces. Therefore when the rehabilitation landscape designs become desolate, in most instances they have become dead spaces, weakening the urban social fabric.First life, then spaces, than buildings the other way around never works (Gehl, 1987)

The informal spaces of the low- income settlements are linked with the life style and the day-to-day activities of the occupants and are created with landscape elements, landscape features and landscape characteristics.Those informal spaces are vibrant and have a sense of the space. Those informal spaces provide the livable and the functional environment to the people who live in the low-income settlement. But the low- income resettlement landscape designs have no functions orlivability and the spatial quality and the sense of the space are also very low. That affectsthe people, their quality of life as well as the strength of the urban fabric. The study is mainly focused on the following objectives.

- Identify how the low-income settlement informal public spaces have become livable and functional.
- Determine the physical environment interaction with their informal public spaces.
- The understanding of the theory of the placemakingon the informal public spaces of low-income settlements

2.0 Attributes of informalpublic spaces in low-incomesettlement

Peopleare poor, but they are not dehumanized. In the slum environment, there are always spaces to meet, talk, cook and wash clothes. There is always a place for the children to play and they have an area of intimate contact such as the front doorstep where children play and the adults chat with their neighbors. Neighborhood meeting places such as a city water tap or the water stream becomesa part of the community.

The idea of the 'ordinary' or 'everyday' nature of cities offers a potential alternative for understanding urban informal settlements in terms of theprocesses, which construct them.This is very important in places commonly categorized as'disorderly', where a 'peopled approach'may be necessary to disentangle the multiple forces. These disorderly created spaces are multifunctional spaces. As Creswell hasstated the "Place" is understood broadly as spaces that people are attached to, or a meaningful location (Wyckoff, 2010). The low- income

settlements are people constructed spaces. Because of that spaces contribute to people's comfort and needs.

Whyteemphasizes the necessity of creatinga social life byusing the elements of the public spaces (Jacobs 1961).Four main attributes in the informal public spaces can be identified;

- Comfort and image
- Access and linkage (informal settlement public spaces have not the specific Access)
- Sociability
- User and activity

3.0 Spatial Arrangements of Informal Public Spaces

The environment is a series of relationships among the elements and people. These relationships are in an order and they have a pattern. In a low- income settlement, we can observe many patterns, whichare created bythe users themselves.The people who live in these settlements also construct informal spaces arrangement.

People's psychological, social and cultural characteristics are often expressed through space.Rapoport (1977) mentionsthat the spaces can be experienced as a three - dimensional extension of the world, which is around us; the interval, relationship and the distance between people and people, people and things, things and things. In a different formulation, Lawton describes the environment as the ecological system having five components (Rapoport, 1977)

- The individual
- The physical environment
- The personal environment
- The supra personal environment
- The social environment

The physical environment; including all natural features of geography, climate, and man-made features limits and facilitates the behavior of the user groups.
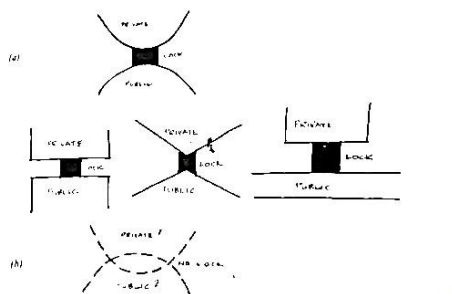

Fig 53: consider a clear division in to private and domains with the controlling 'lock'
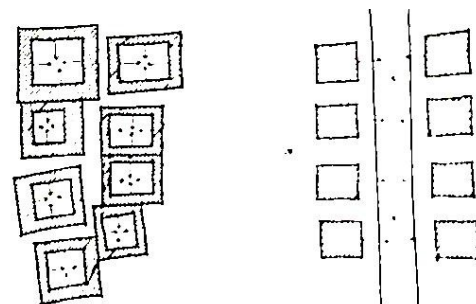
Fig 52: house face and related to, streets

Fig 54: landscape element and spaces arrangement

4.0 Functionality and Livability

The Public spaces of informal settlements facilitate a variety of activities. The individuals or few of them create various spaces relating to their lifestyle, which attracts others. People produced spaces have the quality of the livability and the functionality. Thus, the production of social identities can be seen in the social landscape. A relationship between social identity and place can be noticed. This constancy and strength of this relationship vary and are specific to each human being. People constructed spaces blend with the surrounding landscape. Also, it creates an environmental cognition.

The low-income settlements have characteristics such as mixed-use places, highly accessible environment, low transportation and housing cost. Thephysical arrangements of informal public spaces in settlements havea workable environment for the people. And the spaces function with a quality of permeability, enhancing the interaction between the community and neighborhood.

Fig 55: functioning space in the low-income
settlement

'Livability'is less objective compared to the concept of environmental quality (Pacione, 2003). It's meaning depends on the place, time and purpose of the assessment. Furthermore, the livability is associated with the satisfaction of the needs of health and wellbeing. Livability locates individual experience within social contexts and it is especially concerned with human interaction. In addition, public spaces can provide access to social networks, develop human relationships and induce integration. Most of the enclosed informal gathering spaces facilitate cultural and homogeneous grouping.
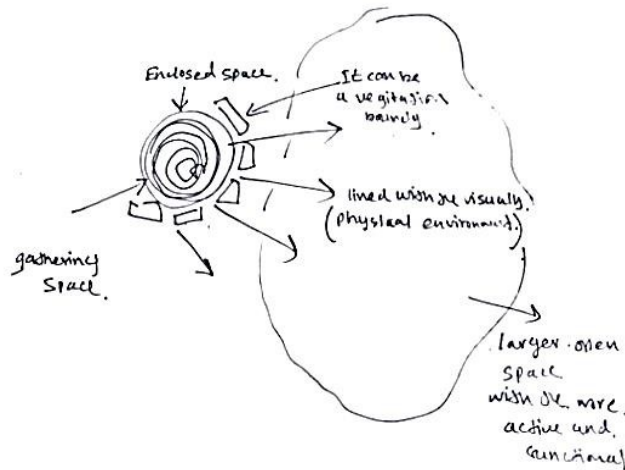
Fig 56: enclosure spaces physical and the visually interact with
the other spaces

4.1 Definition for the Functionality

Functionality of open public spaces depends on the activities and the quality of outdoor spaces. Physical environment is one of the factors influencing outdoor activity. Outdoor activities in public spaces can be divided into three types

- **Necessary activities**
- **Optional activities**
- **Social activities**

Necessary activities are included under all conditions. These activities are dependent on the exterior environment and the participants have no other choice. But optional activities are carried out only under favorable exterior conditions. These activities depend on exterior physical conditions. Social activities depend on the presence of others in public spaces. According to the JanGehl the optional activities increase the quality of outdoor spaces. On the other hand, when the quality of an outdoor area is good, optional activities occur with increasing frequency (Gehl, 1987).

Type of activities	Quality of the physical environment	
	Poor	Good
Necessary activities	●	●
Optional activities	●	●
Social activities	●	●

Fig 57: Quality of the Physical Environment and Frequency
Source: Life between Buildings
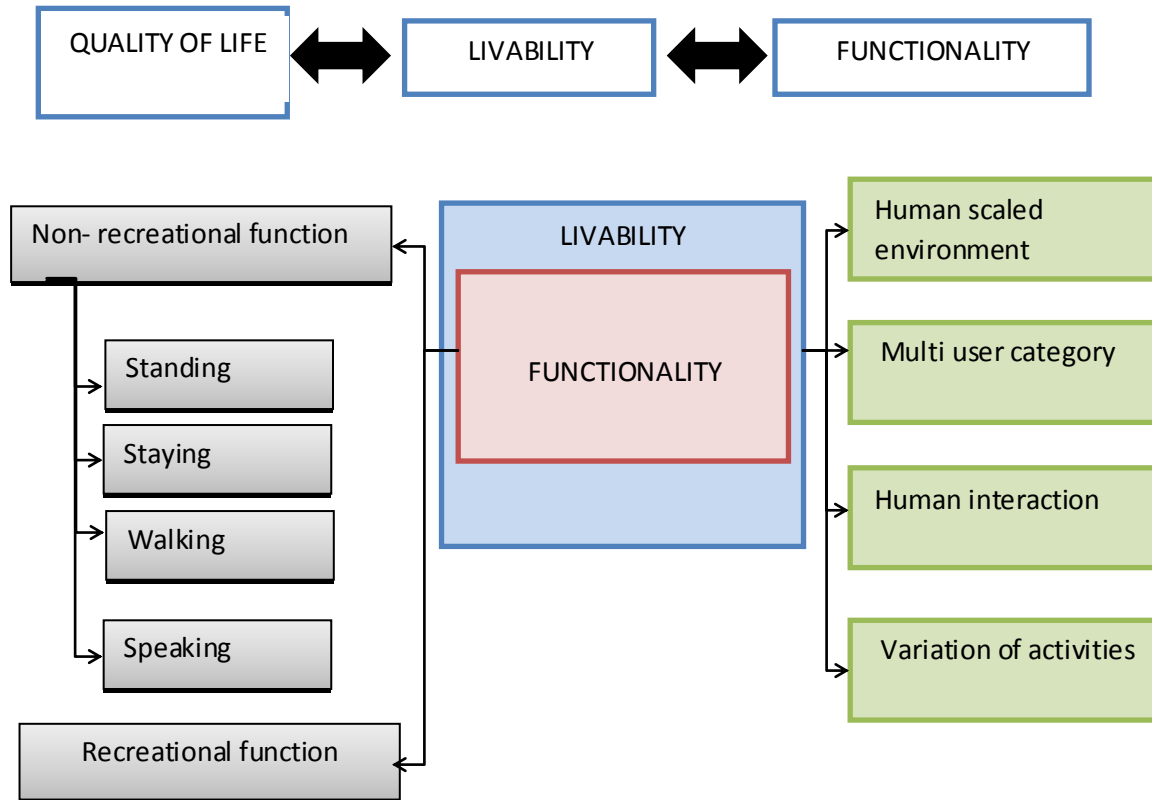
4.2 Attribute of Function and Livability

Fig 58: Attribute of Functionality and
Livability
Source: Compiled by Author

5.0 Placemaking theory

Placemaking inspires people to collectively reimagine and reinvent public spaces as the heart of the community by strengthening the connection between people and the places they share.Placemaking refers to a collaborative process by which we canshape our public realm in order to maximize shared value. More than just promoting better urban design, placemaking facilitates creative patterns of use, paying particular attention to the physical, cultural, and social identities that defines a place and support its ongoing evolution. It helps them to re-imagine everyday spaces and to see anew potential in parks, markets, and neighborhoods.

5.1 Scholarly ideas about the placemaking

The placemaking practice has had many goals over time. Several scholars discussed placemaking bymainly considering the issues of urban planning. They started to raise questions about how public spaces are made appropriate and their purposes. The emphasis was on the human perception of the city and how an individual experiences or navigates urban landscape, which influences things that are important to human centralized urban design

Author and the book	The key ideas on placemaking
Kevin Lynch - The image of the City (1960)	• He discussed about the Human centralized urban designs.
Jane Jacobs- The Death and Life of Great American Cities (1961)	• Cities as Ecosystems; suggesting the dynamic organisms • Change over time and that their composite element • These footpaths, parks, neighborhoods, government and economy all work in a Synergy together, influenced by one another. • Focused heavily on Mixed-Use Developments, incorporating buildings, residences, commercial uses with a key focus on activity in spaces
William h. (holly) Whyte Directed a short film "The social life of small Urban Spaces" (1980)	• He indicated design elements that resulted in creating a successful place such as People, Relationship with street, Management of spaces, Seat ability
Jan Gehl 'Life between Buildings' (1987)	• Emphasized the need to focus predominantly on the spaces between buildings as theprimary strategy when designing a city. "First life, then spaces, then buildings – the other way around never works" • Necessary activities are those that people generally have to undertake regardless of the quality of the physical environment; optional activities are those largely linked with recreational activities such as sitting down to enjoy the view andthey heavily depend on what the place has to offer

Based on the analysis of key scholarly ideas the following were identified as the most significant factors which strengthens the connection between people and the places they share,

- **Mixed-uses (sociable)**
- **Comfort and safe**
- **Hybridity and Flexible spaces**
- **Self-satisfaction**
- **Access and linkage**

6.0 Methodology

According to the theoretical and literature survey, there are four factorsassociated with the functionality and the livability. In addition, there are five factors linked to the theories of place making.

The objective of the research is to investigate how the placemaking contributes to the livability and functionality of informal public spaces of low-incomesettlements.Firstly,the functional and livable informal spaceswere identified according to the factors. Then the contributions of the factors connected to placemaking wereanalyzed.

Time series analysis is used to perceive variation of functions of each communal space during 12 hours. It is highly useful for analysis of variation of activity pattern during the day in different informal public spaces. Through a series of photographic documentation, the variation of activities with different time intervals during a day was explained. Difference of user categories with reference to functionality and livability were analyzed with the aid of the collected data.

7.0 Case study of the Sedawaththa, Kelaniya

Sedawaththais a multi-cultural community. There are several open spaces in the low-income settlement area. However, some of these spaces are used for different activities. The community does not use them as public spaces. Thus,the informal public space in the Sedawaththa settlement hasto be selectedcarefully.

In selectingpublic informal spaces and collecting the data for this study, factors on the functionality and the livability were discussed with the focus group, site observations were made, time series analysis was done, and the mind maps were used. The informal public space attributes such as Comfort and image, Access and linkage, Sociability, User and activitywere considered.When selecting the informal spaces, the mind maps particularly helpfulin identifying the comfort and the image of the informal space as well as the user and activities.

Drawings by children in 6 to 12 age group
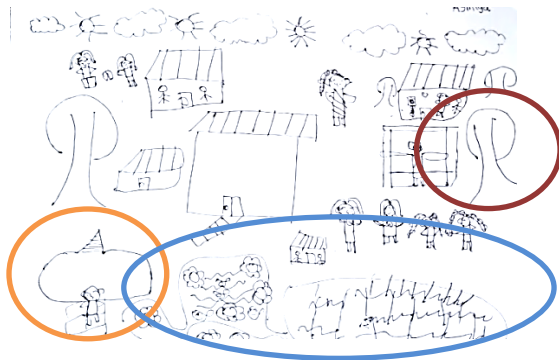
This drawing displaysmany spaces and activities including the man-made and the natural elements.The drawing includes the legible spaces in achild's mind. Nawalokatemple, the front open space and the Kelaniyariverbankare very significant.
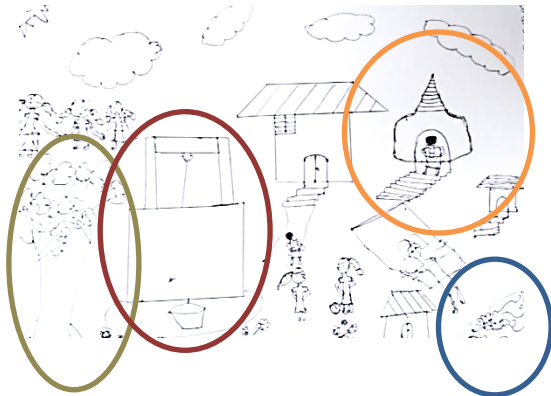
This drawing also includestheir play spaces and theirgathering space in the area. Nawalokatemple, the public well and activities they engage during times of relaxation are shown. This drawing includes the manmade elements and the boundless housing settlements.

This drawing shows some gathering spaces in the Sedawaththa area. This drawing includes the kovil area, the alleyway in front and the children's activities such as the cycling, and playing together

According to the above mind maps, we can identify several key informal spaces.

## 7.1 Selected Informal Public Spaces in the Low Income Settlement

Five informal public spaces were selected for the data collection. The residents were asked their preference for the identified public spaces (n=75). Some did not signify a response.

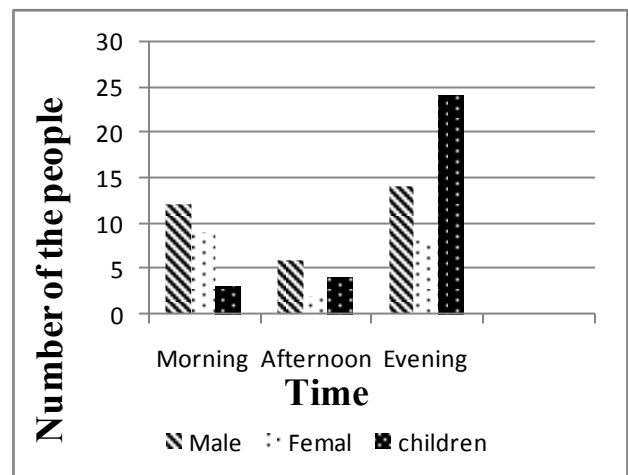| Informal public spaces	Preference No. of persons	Percentage of the people	Majority of the user group
Informal public space A Ground Area	13	86.6%	Male, children and animals
Informal public space B Nawalaokatemple surrounding	11	73.3%	Elders, women, men, children and the venders
Informal public space C Area in front of Kovil	9	60%	Men, women and children, elders
Informal public space D Nawalokapuraalleyway	12	80%	Women, children
Informal public space E Corner area of ground	7	46.7%	Men, elders

According to the above certain patterns could be noticed between the spaces and the user activities/the usercategories.

7.2 Functionality and Livability Patterns in the Informal Public Spaces

Space A- Ground area
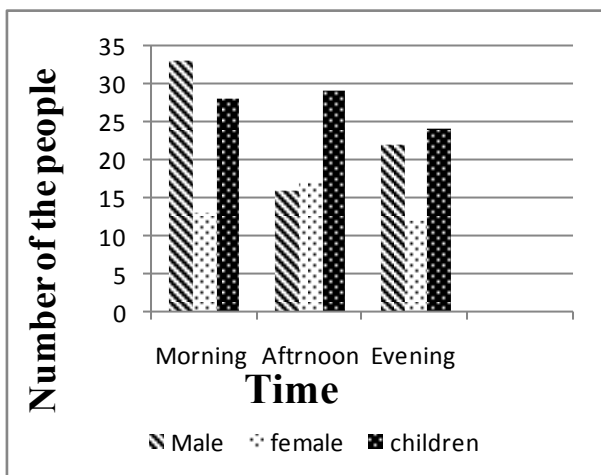
Weekdays at the ground area   weekend days at the ground area

At weekdays this space becomesmore functional. Many people walk through this space and some of them travel to their workplaces and children go to school in the morning. According to the analysis, males and children use this space more. The female presence is high in the afternoon because many women come to this space to dryclothes, and some of them use itwhile feeding their children. Many animals use this space as a shelter.

In weekends, the place is not functioning muchas the residents are spending time in their houses. The space is less functional in the afternoon because it is not climatically comfortable at the time. But it becomes very active in the evening as the childrencome andplaysgames suchas Elle and cricket. The women watch over the children while they engage in conversation with one another.

Variation of activities in the informal space

Optional activities

Necessary activities

Social activities

Necessary activities in the area
The compulsory activities of the space are going to school, work or shops and waiting for another person. These activities are dependent on the physical environment. This space is used as a short cut for some of the houses and as the entry space to the kovil area.
Optional activities in this area

This category includes activities such as talking and walking for relaxation. Optional activities are standing, sitting and enjoying the surrounding activities. These activities depend on the physical environment.

Social activities in the area
The space is used for group activities such as playing games, conducting community meetings, informal conversations etc. They could be recognized as the social activities.

Human scaled environment
This space is very open and therefore, many people are gathering in itdue to itshuman scale. The scale gives a feeling of security and heightens the comfort of the space.

Human interaction
Social interactions take place with the outdoor social activities. When people see and hear the activities, they are drawn into conversations with others regardless of their familiarity to each other. According to Gehl (1987),the contacts are enhanced by ground level meeting places.

This data collection and analysis have covered other selected informal spaces in the settlement.

The chart below represents the summary of the analysis. According to the analysis, the ground area is the most active space with regards to the functionality and the livability factors.
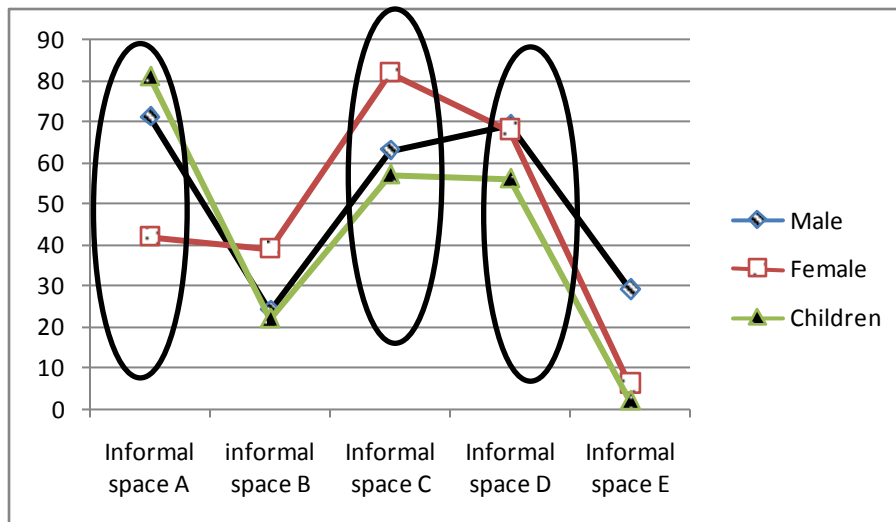

Fig 59: User presence in the each space
Source: compiled by author

According to the above graph, it could be stated that through the observations and time series analysis, there are three active communal spaces out of the five communal spaces. The functionality level has been considered in each communal space.

According to the above graphs we can see space A, C and D are used by all three types of user categories to a considerable level but the space E is mainly used by one user category. This space is mainly occupied by the males. It is enclosed and does not contribute to variety of functions. The spaces B and E does not positively relate to the livability and functionality factors; multi user category, activity variations, human scaled environment and human interaction. The informal public spaces of A, C and D can be recognized as the more functional and livable spaces.

Placemaking of Selected Informal Public Spaces in Sedawaththa

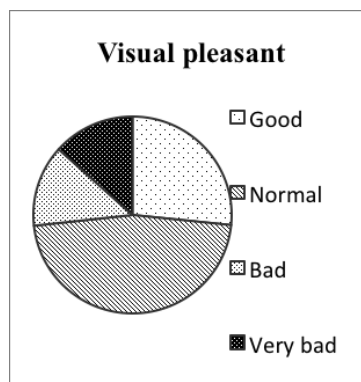The selected functional and livable spaces in the Sedawaththa area have been analyzed considering thefactors below.
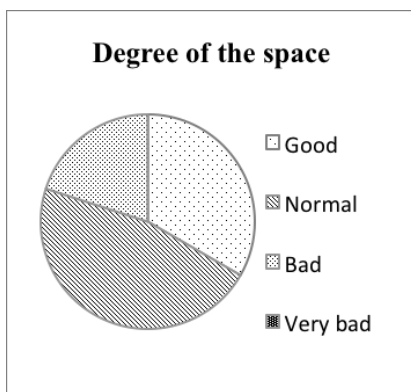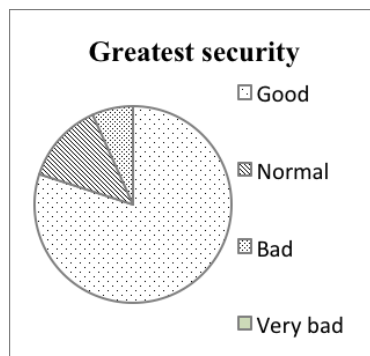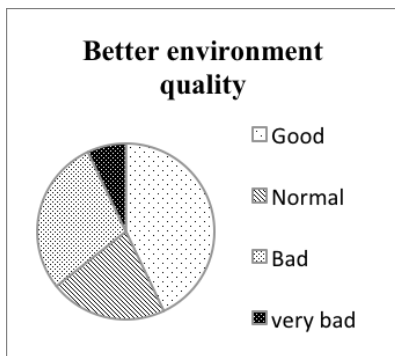
- Accessibility of the space
- Self-satisfaction about the space
- Comfort and safety
- Hybridity and Flexible spaces

Accessibility of the space

- Good
- Normal
- Bad
- Very bad

Self-satisfaction

- Good
- Normal
- Bad
- Very bad
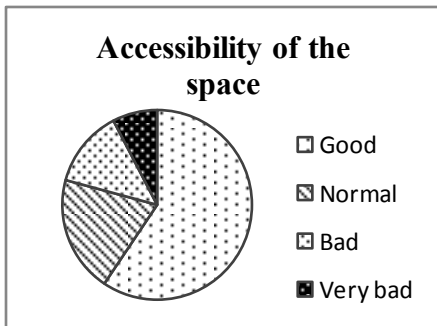
Comfort and safety
Considersthe 4 factors of space
- Better environmental quality (shade of the space)
- Greatest security
- Degree of the space
- Visual pleasant

Better environment quality

- Good
- Normal
- Bad
- very bad

Greatest security

- Good
- Normal
- Bad
- Very bad

Degree of the space

- Good
- Normal
- Bad
- Very bad

Visual pleasant

- Good
- Normal
- Bad
- Very bad

The hybrid and flexible spaces analysis is done by the photo analysis method as well as by using the maps. According to the analysis ground area is the most flexible and hybrid space. According to the overall analysis, this functional and livable space isstrongly related to the placemakingfactors, whichin turn have helped to continue the functionality and the livability in the space.

Other informal spaces such as front of the Kovil alleyway and the Navalokapura alleyway are analyzed according to the above method. Those spaces also contribute to the placemaking factors.

8.0 CONCLUSION

Aplace is generally a space withsocial meaning and value. Social meaning, religious activities, cultural understanding about the role of the space gives a temporal meaning to the space. They are manifestations of the deep involvement of people. When peopleconstructa space, it is done through their beliefs, social interactions, actual shapes and the sense of space. Different groups imbue space and place with different meanings linked to social construction and the people's needs.

Three out of the five selected informal spaces are very functional and livable spaces. They facilitate the necessary, optional and social activities of ordinary citizens who live in the area or visit the settlement.

The functionality and livability factors identified arehuman scaled environment, multi user category, social connection, and activity variation. They were evidently present at the ground area, in front of the kovilandthe Nawalokapura alleyway.

The ground area is a highly functional space. The identified factors of placemakingsuch as comfort and safety, self-satisfaction, accessibility and the linkage, and hybrid spacehave a strong presence in the space.

The front area of Kovil is another functional and livable space, which also has a strong link to the placemaking. People who construct the space haveunconsciously contributed to the placemaking factors too. Moreover, those places represent the effective connections between the people and spaces. Some of the placemaking factors are not presented at a "good" level but a high percentage of peoplestate that those factors are at a "normal" level.

Nawaloka area alleyway is another functioning and livable area and it also has a positive relationship to the placemaking factors to a considerable level according to the analysis.

According to the above data, findings and analysis it could be concluded that functional and livable informal public spaces at the selected low-income settlement have a strong presence of the identified placemakingfactors.

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