Contribution of Built Environment on Inclusive Urban Design: with Special Reference to Selected Transport Related Public Spaces in Galle, Sri Lanka

GPNN Kumara, MLNH Premarathna, and SMM Sanjunee

Department of Architecture, General Sir John Kotelawala Defence University, Sri Lanka

<minosha.sanjunee@gmail.com>

Abstract: Designing architectural spaces is thought to contribute to social inclusion, eventually satisfying all components of the society. The building and space characteristics have a powerful impact on the quality on peoples 'lives. It's all about the choices the planners, developers or architects make. And those choices can either encourage or restrict people's well-being. With parallel technological innovations to these built environment and sociological research, many characteristics have been added to the built environment that empowers availability, security and feeling of belonging. This scenario is also apparent in developing nations as the bulk of the population belongs to the poor and low-income groups. Furthermore, the suggestions for growth are always subject to other factors such as policy, financial factors and profit. With regard to all these problems, there have been numerous summits and conferences on maintaining social inclusion, achieving general sustainability. Among them, the Sustainable Development Goals 11 is one of the most prominent in the process of transforming towns into more livable urban buildings and also highlights social inclusiveness as a major need. The whole research aims to promote social inclusion and defeat the present exclusivity. Social exclusivity leads to arise in social inequity, which is today's primary social problem. In overcrowded government areas such as the Galle bus stand and the Galle railway station, these problems are very evident. The objectives of this study are to, identifying the probability of exclusive design to create social inequality, understanding and defining the Social Inclusion as a concept, and then identify the potentials of inclusive design on overcoming social issues.

Keywords: Social Inclusion, Architectural design, Exclusive design

Introduction

Once the society is analyzed well, many social problems can be identified. Social unrest, social conflicts, accidents, alienation of victim groups are few of them. And sociological studies point out that they all rise as a result of exclusive urban designs. Many different sociological studies have pointed out these issues and their relation to built environment. Recognition of built environment in causing these numerous social issues varying in diverse social and cultural contexts, the professions and scholars of the built environment started on studying the issue.

Many of these social issues are caused due to the exclusiveness of the city or built environment structure. This exclusiveness leads to social inequity and cause number of social issues such as, social unrest in low income groups, social conflicts between lower social groups and upper social groups, occurrence of protests and other violence activities against the ruling systems, law agendas and authority decisions. In contributing reducing these issues the built environment professionals came up with a new concept in their professional study area to overcome these causes of built environment in order to sustain the globe as a whole.

The concept "Inclusive Urban Design" emerged as a solution for this in the field of

built environment. Social Inclusion can be defined as, is the process of improving the term in which individuals and groups take part in society- improving the ability, opportunity and dignity of those disadvantaged on the basis of their identity (World Bank official website). It is believed that designing of architectural spaces can contribute on achieving social inclusion, ultimately satisfying all the parts of the community.

The qualities of buildings and spaces have a strong influence on the quality of people's lives. It all lies on the decisions that are made by the planners, designers or Architects. And those decisions can either promote or limit the well-being of the people. With technological developments parallel to these built environment and sociological studies, many features were added to built environment empowering accessibility, safety and sense of belonging.

But still some of the issues remain still due to the lack of concern of the planners and their decisions on the proposing redevelopment plans. In developing countries this situation is further noticeable as a majority of the population belongs to the poor and low income groups. And moreover public spaces common for these low income people is always under limitation of services. Further the development proposals are always under other influences such as, politics, economic considerations and profit. Concerning all these issues there were many summits and conferences on sustaining social inclusion, achieving overall sustainability and built environment in achieving sustainable and inclusive city structures. Among them, the Sustainable Development Goals 11, is one of the prominent in the process of transforming the cities into more livable urban structures and also mentions the social inclusiveness as a prime concern.

Sustainable Development Goals commonly known as SDG 11 establishes goals for urban areas around the world to be both sustainable and inclusive. As three out of ten goals of SDG 11 relates to ensure accessibility equity, it can be considered as the prominent and foremost important document in regards to social inclusion. These three goals feature provisions to 'ensure' or 'provide' access to environmental goods and services, including basic housing, sustainable transport, and urban green spaces, in particular for the commonly known victim groups of exclusive cities, namely, women, adults, children, disabled. (John Brandit, T Chakraborty, Glenn Sherif, 2018) Social inclusions achieved by Built environment always promote social sustainability. This contributes to overall sustainability and well-being of both living component and physical component of a city. Galle is a city on the Southwest coast of Sri Lanka. It is city founded by Portuguese colonists in the 16th century.

City is known for the Old Dutch fort, Light house, Dutch reformed church and many more. Due to all these notable architectural pieces and beautiful coastal line, Galle is one of the cities in Sri Lanka with the highest tourist attraction. Because of this most of the re-development plans led by the local authorities are always focused on tourism, while the needs of local community are set aside to a larger extent. This is one of the major reasons for built environment to be exclusive to many vulnerable groups.

Galle being a city accommodating a dense population, and being a transit city use by a large population, transport related public spaces (bus stand and railway station) depict the features of exclusive built environment.

The whole study is aimed at promoting social inclusion, defeating current exclusivity of the city structure. As social inclusiveness is a wide and complicated concept, covering many areas such as, housing, green spaces,

transportation and other numerous services provided by a city, the dissertation is only limited to the inclusivity of transport related public spaces.

Study will include three main parts, first it will state the social inclusion as a concept in professional studies and its relation to physical built environment through the existing literature sources, and then a field study will be conducted, in the framework compromising stated indicators of social inclusion, to measure inclusivity and identify the issues in the existing context.

Galle being the capital of the Southern province is a very prominent and a densely populated city. This bustling city is very popular transit cities which provide access to many other suburban areas. And Galle is one of the best tourist destinations in the Island too. Due to this reason large number of tourists is accommodated in the city limits. This has resulted in leaving the local community aside and giving the priority for the tourism. And this is further influenced by the development proposals aiming tourism developments. And once a public space is designed aiming a one or few social groups of people or in other words if many social groups are abandoned when these public spaces are designed; they give rise to many social conflicts and social exclusiveness. Social exclusiveness results in the increase of social inequity which is a prime social concern of the present day.

These issues are very much clear in overcrowded transport related public spaces such as Galle bus stand and Galle railway station. This particular problem is discussed in detail in this research study.

The aim of the study is to understand the contribution of built environment, architectural practice on inclusive design. The aim will be achieved through few objectives such as, identifying the probability of exclusive design to create social inequality, understanding and defining the Social Inclusion as a concept, and then identify the potentials of inclusive design on overcoming social issues. Then the level of inclusivity of two selected public spaces of Gale will be measured and evaluated. Research will adapt a mixed method compromising both quantitative and qualitative methods. The primary data will be collected through surveys and interviews. Through purpose sampling the participants will be selected for the questionnaire assessment. And secondary data will be collected through books, research papers and other existing sources of literature, covering the areas of Inclusion, social sustainability and urban planning.

The primary data will be used to measure and evaluate the degree of inclusivity of two selected spaces of Galle city and secondary data will be used to make suggestions to overcome the identified issues. Parallel to that a field study will be conducted to document the physical parameters of the built environment.

In measuring the degree of inclusivity of the existing city context, a framework is developed, based on the SDG 11. The framework includes three main indictors and based on the framework the questionnaires and interviews will be structured. Proportion of urban population that has convenient access to public transport, by sex, age and person with disabilities, proportion of population with direct participation in transport spaces and access to regarding services, and average share of the built up area of the city that is open space for public use for all by sex, age and persons with disabilities.

Literature Review

“Meeting the needs of the present without compromising the ability of future generations to meet their own needs” A process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and

institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations" (Bruntland, 1987)Sustainable development is an inter balance of environmental resource protection, social progress, economic growth and stability for the present and future generations to come.At the Rio de Jeneiro earth summit of 1992, economic growth, social inclusion and environmental balance were identified as the paradigm of sustainable development. (UCLG, 2010) Above named dimensions alone cannot possibly cover the complicated current society therefore agencies and institutions such as UNESCO introduced culture as the fourth pillar of sustainable development that provide a means of connections between the three other pillars of sustainability. (Fathian, Powell, 2009)

Social sustainability is an often-overlooked aspect of sustainability as overall sustainability cannot be approached by only looking into the other two pillars of sustainability.

"Social sustainability occurs when the formal and informal processors system, structures and relationships actively support the capacity of current and future generations to create healthy and livable communities. Socially sustainable communities are equitable, diverse, connected and democratic and provide a good quality of life." (WACOSS, 2002)

The UN global compact cities state human rights as the cornerstones of social sustainability. This extends to special community groups such labor force, women, children, indigenous people, poor, uneducated and minority ethnic groups. Social sustainability is a worthy investment in urban design projects as city residents and users are safe, satisfied, healthier and more productive.Furthermore, socially sustainable built environments enjoy greater production, consumer patronage as city users tend to support their living environment. Aiming for social sustainability can help a city to attract more investments, work force, tourists which can positively influence the economy of the city.

This present situation give rise too many issues related to environment, society and economy of the world. As this uncontrolled and unorganized built environment get wide spread day by day giving raise to many issues, it is now identified as a highly contributing factor in sustainable development. Many research studies have now identified and urge of a new definition of the relationship between built and natural environment in order to achieve a more sustainable society.

The concept, Sustainability can be defined as development that meets the needs of the present generation without compromising the ability of future generation to meet their needs. Sustainability is based upon three pillars: economic growth, social progress and environmental protection. And in order to achieve sustainability in built environment it includes designing, building and operating structures to extend it meets or exceeds the expectation of the clients and wider stakeholders.Amidst many expectations and demands of the clients and stake holders from the companies related and operating built environment, expecting the company to behave ethically, treat people fairly, increase the wellbeing of people, protecting and enhancing the natural environment, minimize the consumption of energy and natural resources and conveying social value through operations can be high lightened as the major and foremost expectations of clients and stakeholders.Built environment is one of the most highly contributing factor of sustainable development which influence all the three aspects of sustainability, environmental, economic and social .This is clearly seen in OECD countries (Organization for Economic Co-operation and development). In these

countries built environment is responsible for 25-40% of total energy use, 30% of raw material use, 30-40% of global greenhouse gas emissions (45% in UK), for 30-40% of solid waste generation. Apart from that people spend almost 90% of their life inside buildings; therefore it is very clear that built environment is a highly contributing factor of sustainable development. Buildings and construction works are identified as largest single share in global resource use and pollution emission. (William, 2012)

At present social sustainability is identified as the main concerns of today's world. And built environment has an effect on social sustainability too. Though it is hard to see the connection of objective physical world with the society at once, it is recognized that this objective physical built environment is cable of making subjective reactions that effect social sustainability. There are many issues related to social sustainability. Human rights, equity, safety, wellness, empowerment, fare labor, living conditions, health, community engagement and many more are included in the issues related to social sustainability.

These issues are not easily quantifiable or measurable. But they can be easily identified. Especially in transport related public spaces these social issues are clearly seen. Few examples lack of accessibility, safety issues, lack of infrastructure facilities and overall spatial quality of the spaces. These are the primal causes of socially exclusive urban built environments.

Research studies carried out in the field of sociology have clearly pointed out the relationship of subjective social exclusion and objective built environment. This recognition has given the rise for an architectural consideration on built environment as socially inclusive public built spaces.

Social Inclusion as a goal in Sustainable Development

In 1972, governments met in Stockholm, Sweden for United Nations Conference on the Human Environment to consider the rights of the family to a healthy and a productive environment. In 1983, the United Nations created the World Commission on Environment and Development. Later it was named as the Brudtland Commission, which defined the sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" Negotiation on the post – 2015 began in January and ended it August. This was carried in parallel to the negotiations on financing development by United Nations. A final document was presented at the UN Sustainable Development Summit in September 2015 in New York.

UN General Assembly took place with the presence of 193 countries on 25 September 2015. Assembly adopted the 2030 Development Agenda which was titled as "Transforming our world: the 2030 Agenda for Sustainable Development". This agenda is comprised of 92 paragraphs and 17 Sustainable Development Goals (SDGs) are included in the paragraph 51. Apart from the 17 sustainable development goals 169 targets and 232 indicators are included the agenda. There are 196 targets to be accomplished to achieve the 17 goals and each target has between 1 and three indicators that are used to measure the progress towards each target. There are 232 approved indicators in total. (John Brandit, T Chakraborty, Glenn Sherif, 2018) Eleventh goal of 17 SDGs is named as sustainable cities and communities. In detail this goal is stated as "make cities and human settlements inclusive, safe, resilient and sustainable".

Indicators of social inclusivity

When the attention is focused on environmental sustainability in cities, the 11th goal of SDGs proposes that cities must be both

sustainable and inclusive. Three indicators out of ten indicators for 11th SDG state that "ensure" or "provide" access to environmental goods and services such as housing, sustainable transport and urban green spaces. And the access to these spaces must be ensured for all the parties of a community such as women, children, adults, disable people, priests and etc.

Out of the main indicators related to social inclusion SDGs (11.1, 11.2, 11.6, 11.7) 11.2 is related with transport related public spaces. The indicators 11.2 and 11.2.1 is stated as the proportion of population that has convenient access to public transport, by sex, age and personals with disabilities.

Furthermore 11.2 states that by 2030 access should be granted for every individual including with the individuals those are in vulnerable situations such as women, children, disable people and old age people to safe, affordable and sustainable transport systems. It is stated that special attention to be paid for those in vulnerable situations. (John Brandit, T Chakraborty, Glenn Sherif, 2018)

Defining Social Inclusion

According to SoSLC report of 2018 it clearly states the importance of a spatial development for a better urban future for all the Sri Lankan cities. SoSLC report further explains the five main attributes of spatial development. They are competitiveness, resilience, safety, sustainability and inclusivity. (SoSLC, 2018)

It also suggests rapid expansion and sprawl as factor to reduce inclusivity. Urban sprawl means the unrestricted growth of housing, commercial development, and roads over expanses of land in urban areas without a proper planning. Urban sprawl causes difficulties for residents in the urban periphery to access urban services. In order to achieve urban development redrawing urban boundaries in a way that residents are included in peri-urban fringe is very necessary.

Social inclusion is the process of improving the terms of which individuals and groups take part in the society – improving the ability, opportunity and dignity of those disadvantaged on the basis of their identity. In every country certain groups such as indigenous, migrants or other minorities confront barriers that prevent them from equally participating in their nation's political, economic and social life.

These groups are excluded through numerous factors ranging from gender, race, ethnics, religion, disabilities, and stereotypes, superstations based on gender, sexual orientation and gender identity. These kinds of practices can negatively impact on any of these social group's dignity, security and living a better life.

Social inclusion and built environment

Once the place we live, facilities and services we use and our neighborhoods and meeting places are designed inclusively and, in a manner, which is easy to access them, then the built environment can contribute to a more inclusive and a cohesive society. The term inclusion has a very wide meaning, it is not just access- this starts from what is an inhospitable built environment looks and feel like and extends up to unintended social, cultural and economic inequalities.

The way how people experience the built environment is different from one individual to another. It differs according to who they are. One's social, cultural and economic background effects on how a particular person experiences the built environment. In order to make every single individual comfortable in a particular space or to make them feel that the place belongs to them, a wide diversity of experiences is needed to be considered. The following perspectives of few individuals vividly illustrate clearly how they experience the built environment differently."Being able to live well in my home environment is essential to my mental and physical wellbeing.

Yet those of us most at risk of breakdown in our mental health and well-being are much more likely to live in squalid housing amid constant noise and in an environment where we are subjected to harassment and abuse. Quiet, books, natural beauty, green, open spaces – these are all essential for me.

As this study is specifically focused on transport related public spaces and their inclusivity, it is important to consider the inclusivity and urban built public spaces separately to identify the relations between inclusivity and urban built spaces.Once we consider the transport services, we just simply don't use them. When we say we use transport services it also means that people are getting around and using the space too. Getting around means much more than accessing buses, trains or any other public transport. This includes the presence of well-designed and well managed streets and roads with less traffic that does not affect free movement. Inclusive transport related public spaces refer to dignified, accessible, affordable, safe and easy spaces to use. Or in other words an inclusive transport design can be easily used by everyone to get around.

Therefore, such spaces must possess chill proof shelters with security, seating, talking countdown systems, emergency phones, a safe and a comfortable place to wait, security at night for all the parties and many more. And also buses with ramps and etc. must be there for people. And when it comes to social inclusion in built environment, location is also one of the most important factors. And when designing the spaces, they are built in a way it specifically related to the location. The location and the design of place have a major effect on how people benefit from them.

When selecting locations, design, equipment for public spaces, often they are fail to take minority cultural and religious groups, women, disable people, old people and many more other groups in vulnerable situations into account.

Most of the time these vulnerable parties are isolated and left aside. The designers and constructors are often unable to pay attention to the special requirements of these groups.

For an example when the public spaces are built issues such as the absence of spaces for prayers and washing facilities and etc. can be seen in common. Impacts of a bad or a poor design are more likely to be felt by groups such as disables, old people, kids women, priests and people from minority religions and etc.

Location is one of the deciding factors in inclusive built environment. For an example decentralization of healthcare services is now a very commonly accepted concept. This is now very welcome as it is good for patients as they have fewer disturbances from noises and etc. But there are practical issues linked with them such as how easy are they to be used by people without a car. The physical and technical access to a particular space is discussed as a vital design issue. And also, despite the very advanced technologies, anti-discrimination legislations and policies and etc.

There are many buildings that are still difficult for disable people to enter with dignity and ease. Managing a space is important in a way that every individual who visits the space feels that they belong in here.

Inclusive design is a process of designing, building, managing and populating places and spaces that ensure that they work for as many people as possible, not just some groups. It encompasses where people live and the public buildings they use, such as health centers, education facilities and libraries; and how they get around – neighborhoods, streets, parks and green spaces and transport.

An inclusive design is basically about 3 main factors. Which are namely, access with dignity, treatment with respect and relevant services

and there are six main characteristics of an inclusive built space. An inclusive space be responsive to people's needs, be flexible in use, offer choice when a single design solution cannot meet all users' needs, be convenient so they can be used without undue effort or 'special separation', be welcoming to a wide variety of people, making them feel they belong, accommodate without fuss or exception those who have specific requirements.

Inclusive design takes into account people with specific mobility, dexterity, sensory, and communication impairments; learning disabilities; continence needs; and people whose mental well-being should be supported by a thoughtfully crafted and managed environment.

Consultation is a key to inclusive design. Right from the outset of any project, particular attention should be paid to those likely to be overlooked or whose views are less likely to be accommodated. This includes women and transgender people, elderly and younger people and children, religious minorities, poorer and socially excluded communities, lesbians and gay men, black and minority ethnic people. This does not happen enough; for instance, people who are victims of racist and homophobic hate crime are unlikely to be consulted about the design of public spaces.

Benefits of social inclusion

Inclusivity and built environment are two components which are interrelated and are influencing each other. Sustaining inclusivity provides numerous benefits to the community as a whole despising the varieties of it. As the main character inclusive designed spaces will be welcoming to all, it will enrich the sense of equity in the community and diversely impact the social well-being. Further inclusive urban built environments will provide easy access to all the social groups providing specific needs of them, without hurting their dignity or occurring anxiety. All these can strengthen the mental health of the users and sustain the well-being of the whole community.

Further more inclusive built environment provides equal access to economic and natural resources and other services in the city, which can affect the economy of the country.

III. methodology and data analysis

The aim of the study is to understand the contribution of built environment, architectural practice on inclusive design. To achieve this goal, the survey used structured questionnaires in personal interviews. Structured questionnaires may be the most widely used technique for collecting survey data and are widely used in descriptive and analytical research to identify facts and opinions.

Research approach

Research methods are mainly divided into quantitative and qualitative. Quantitative methods are often associated with positivism, collecting factual data, studying the relationship between facts and these facts, and methods corresponding to previous theories and findings. The survey method chosen for this study is the most appropriate. There is an important difference between research and investigation. The studies "gather information about the characteristics, behaviors, or opinions of many people (so-called populations)." Research that encourages scientific knowledge" (Kraemer, 2002). The design and methodology of the study should also be matched when selecting a particular research method. Research design refers to the overall strategy of those who choose an attack problem, and for the effective resolution of the problem, it is necessary to consistently and logically integrate other components of the research (Grover, 2015).

Research technique

Researchers need a lot of tools and skills to gather information. Testing is a measurement tool that guides researchers through data

collection and evaluation. Equipment complexity, analysis and research design vary. Each tool is suitable for collecting specific information. This study is used to collect information about various research data. But their strategies, issues, interviews, timelines, monitoring and evaluation scale.

This study requires data views and opinions on skilled structures. Therefore, data collection surveys and interviews are collected from the top of selected research strategies.

Data Collection Technique

The aim of the study is to understand the contribution of built environment, architectural practice on inclusive design. To achieve this objective 130 people 0f bus stand and 130 people of railway station were randomly selected. This study selected 7 categories of people which Schooling children, disabled person, office workers, tourists, middle age women, old age persons and clergy. The questionnaire collected preliminary data and selected secondary data from the Government Statistics Office in Sri Lanka and previous literature reviews, articles, books and surveys.

Questionnaire design

The purpose of the questionnaire is to obtain further information to support the research objectives and identify the probability of exclusive design to create social inequality, understanding and defining the Social Inclusion as a concept, and then identify the potentials of inclusive design on overcoming social issues. This questionnaire includes 17 questions regarding the study. It mainly focuses about the scale type questions.

Methodology for the research

Research will adapt a mixed method compromising both quantitative and qualitative methods. The primary data will be collected through surveys and interviews. Through purpose sampling the participants will be selected for the questionnaire assessment. And secondary data will be collected through books, research papers and other existing sources of literature, covering the areas of Inclusion, social sustainability and urban planning.

The primary data will be used to measure and evaluate the degree of inclusivity of two selected spaces of Galle city and secondary data will be used to make suggestions to overcome the identified issues. Parallel to that a field study will be conducted to document the physical parameters of the built environment. The framework includes three main indictors and based on the framework the questionnaires and interviews will be structured. Proportion of urban population that has convenient access to public transport, by sex, age and person with disabilities, proportion of population with direct participation in transport spaces and access to regarding services, and average share of the built up area of the city that is open space for public use for all by sex, age and persons with disabilities.

Method of data analysis

To choose the right analytical method, you need to understand the level of measurement. There is a suitable method for each measurement method, but no other method is available. In this study, a hierarchy was used. Numbers assigned to significant digits (1, 2, 3, and 4) have the same spacing between scales and do not represent absolute numbers.

Table 1: Structure of ratings

Item	High satisfy	Satisfy	Not satisfy	Cannot comment
Scale	1	2	3	4

In measuring the degree of inclusivity of the existing city context, a framework is developed, based on the 11 Sustainable Development Goals.

Data analysis

This chapter discussed the analyzed data and

results of the study. 130 people of bus stand and 130 people of railway station were randomly selected. This study selected 7 categories of people which Schooling children, disabled person, office workers, tourists, middle age women, old age persons and clergy for give clear idea about the social exclusiveness. This chapter mainly provides the overall information of contribution of built environment on inclusive urban design.

Galle is the capital of the southern state and is a very important and densely populated city. This bustling city is a very popular transportation city that leads to many other suburbs. Galle is also one of the best tourist destinations on the island. For this reason, many tourists are hosting this city. This leads to putting the community aside and prioritizing tourism.

The main objective of this study is to understand the contribution of built environment, architectural practice on inclusive design. This main objective will be achieved through few sub objectives such as, identifying the probability of exclusive design to create social inequality, understanding and defining the Social Inclusion as a concept, and then identify the potentials of inclusive design on overcoming social issues.

This research conducted 7 different categories of people with Galle bus stand and Galle rail way station and identified variations among these people. When considering total sample of the study, this study found out following results.

Case Studies

There are two main case studies taken to study in this research study. The first one is the Galle Railway station and the next one is the Galle bus stand. As mentioned above the questionnaire study will be conducted to check the indicators found in literature review. The two indicators for the case study I (Railway station) are as below,

"Proportion of urban population that has convenient access to public transport by sex, age and person with disabilities."

"Proportion of population with direct participation in transport spaces and access to regarding services." The two indicators for the case study II (Bus stand) are equal as above.

Iv. concluding remarks

Chapter 4 includes the conclusion, recommendations and limitation of the study. This chapter discusses the aim of this study and the objectives and the hoe far achieve those aim and objectives. To explain those achievements this chapter uses the data which collected and previous related literatures. Moreover, this study mainly discusses the 7 categories of people which Schooling children, disabled person, office workers, tourists, middle age women, old age persons and clergy for give clear idea about the social exclusiveness. Finally, gives conclusion regarding to the aim and research objectives.

The study was intended to understand the contribution of built environment, on inclusive design. The aim will be achieved through few objectives such as, identifying the probability of exclusive design to create social inequality, understanding and defining the Social Inclusion as a concept, and then identify the potentials of inclusive design on overcoming social issues. The main case study done on Galle, Sri Lanka is played with numerous negativities, and exclusive to its local users. The prevailing exclusivity can be concluded as; the two main transportation hubs (railway station and bus stand) are not accessible to disabled users, lack of transition available, hard to access at peak time of usage, lack of opportunities, safety, and supportive service.This makes nothing lack of Galle to be exclusive in all the aspects. Yet Galle as the main transit city of the southern region of the

island a huge population daily engages with this exclusive city structure.

According to the collected data there is an exclusive urban design in the Galle city. This design mainly based on the tourism. That's why the satisfaction of inclusiveness of the railway station and bus stand, only tourists are satisfied with this indicator and other six category of domestic passengers are not satisfied with this indication. And also this results show that the probability of exclusive design to create social inequality. Especially, people who disabled, old and middle age; they should have fair services in the public transportation services. But, chapter 4 showed that those particular respondents are not satisfied with the services of Galle railway station and bus stand. It is also a reason for social exclusiveness. There services also focused on tourists. But the problem is local passengers are using public transportation services than tourists in Galle city.Through the analysis it is identified that, the planning concepts on mainly focusing on tourism as the most influential cause of exclusivity of the city. Focusing on tourism has been demarcating the provisions of the local communities.City is a composition of social component interacting with physical environment. Losing its local society may not lately support the focused tourism.Therefore the analysis was done to figure whether the Galle prevailing city structure is compatible with the concept of "inclusive planning". The results confirm that city is still potential enough to make it inclusive for its local users as well as foreigners. Planning for urban planning measures to enhance inclusiveness can take several forms. First, removing exclusivity can have an important impact in current urban planning regimes and procedures. Improving the accessibility of transport for marginalized groups can be facilitated or free transport for the poor in the city, or for people who travel from a greater distance, or set up new transit routes to serve previously uninhabited settlements, making investments in transport without transit time reduced. A proper planning intervention may therefore make Galle an inclusive urbanity for the generation to come. This will enrich and celebrate the local livelihood promoting the tourist a livelihood to enjoy. A city of tomorrow, inclusive will sustain the society, improving tourism positively affecting the economy, and will ultimately sustain the Galle city both heritage city and outer city. Preserving the greatness and historical values which are experienced by the present generation to the future generations.

I. References

Barnes, C. (2012). Disability, Work and Welfare. Sociology Compass, pp. 472 - 484.

Bartuska, A. M. (2007). Human Needs vs Environmental Context . Boston: Boston Publishers.

Bruntland. (1987). Our Common Future. Strasbourg: Federal Office for Spatial Development ARE.

Cliona Rooney, K.H. (2016). Meeting the needs of visually impaired people living in Lifetime Homes. Housing for the Elderly, pp. 123-140.

Della Gaspera, L.B. (2018). Creative Cities and Gentrification. Madrid: Management of Creative Industry.

Douglas, R. (2017). Building Inclusive Cities. Cambridge: Women in Informal Employment.

Fathian, Powell. (2009). Culture as the Fourth Pillar of Sustainability . Shiraz: John Willy & Sons.

Giles, A. (2008, May 28). Sustainability, the capital approach and the built environment. Developing Theories of the Built Environment , pp. 241-247.

Hanson, J. (2007). The Inclusive City: delivering a more accessible urban environment through inclusive design. London: Taunton press.

John Brandit, T Chakraborty, Glenn Sherif. (2018). The Urban Environment and Social Inclusion Index . Yale: Research Gate.

Klein, D. (2002). Menatl Health and Physical Well-being. New York: BMC Psychiatry.

Moffat, Kohler. (2008). Built Environment and Man Made Surroundings. Austin.

SoSLC. (2018). Better Urban Future for All the Sri Lankan Cities . Colombo.

Acknowledgment

Firstly and with most honors, I am greatly thankful to my external supervisor, Archt. Prasanna De Silva for his excellent supervision. I extend my sincere thanks to Archt. Nuwan Premarathne for his interest, encouragement and the guidance towards this work as my internal supervisor. I also thank the assistance offered to me in numerous ways by Head of the Department of the Department of Architecture Archt. Kihan Pathirana.I also thank the year master Archt. Anjana Nawarathne for assistance offered to me in numerous ways. Last, but not least, I express my warm gratitude to Prof. Harsha Munasinghe for willingly giving me his utmost support, advice and motivation.

Author Biography/IES

G.P.N.N. Kumara is an undergraduate in the department of architecture, General Sir John Kotelawala defence university, Southern campus. Currently awaits the convocation and is under military training academy of Sri Lanka Army at Diyathalawa.

Archt. Nuwan Premarathna is a Senior Lecturer at the Architecture department of General Sir John Kotelawala Defence university. Currently serve as the year coordinator of the B.Arch first year and supervise number of dissertations and research studies at the department.

S.M.Minosha Sanjunee is an undergraduate in the department of architecture, General Sir John Kotelawala defence university, Southern campus. Currently awaits the convocation and works as a member of the KDU design consultancy unit as a Junior Consultant.