



TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
PULCHOWK CAMPUS

THESIS NO.: 076/MSUrP/003

A THESIS REPORT ON
GENDER INCLUSIVENESS IN THE PLANNING OF URBAN SPACES

BY
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SUBMITTED TO THE
DEPARTMENT OF ARCHITECTURE
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF SCIENCE IN URBAN PLANNING

DEPARTMENT OF ARCHITECTURE
LALITPUR, NEPAL

SEPTEMBER 2022

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DECLARATION

I hereby declare that the thesis entitled “**Gender Inclusiveness in the Planning of Urban Spaces**”, submitted to the Department of Architecture in partial fulfillment of the requirement for the degree of Master of Science in Urban Planning, is a record of an original work done under the guidance of Dr. Ajay Chandra Lal, Institute of Engineering, Pulchowk Campus. Except for the material consulted, which has been properly referenced and acknowledged, all of the work in this thesis was done by me.

Astha Acharya

076MSUrP003

ABSTRACT

Due to the difference in the biological and social need of men and women in urban society, they have different ways of using public spaces. Such concerns are rarely addressed in the planning process. Therefore, cities planned and built in gender-neutral ways limit women and girls from exploiting the city's infrastructure and services equitably.

This paper aims to identify the extent to which gender inclusivity is considered during the planning stage of urban spaces in Kathmandu and what impact it has on the designed space's gender inclusiveness. It was found that there was limited involvement of the female in the planning and designing process of the parks. The infrastructure of the park was found gender neutral and the percentage of females using the park was significantly lower than males. This was due to the lack of incorporation of a female perspective in the design. Hence, functions such as child cares in parks and less male-dominated spaces need to be integrated into the design through female participation starting from the planning phase to render the urban spaces gender-inclusive.

Keywords: Gender, Inclusion, Urban Spaces, Gender Inclusiveness

ACKNOWLEDGEMENT

This report is prepared for the Partial Fulfillment of the Requirements for the Degree of Master of Science in Urban Planning (MSUrP) as the final thesis report. I would like to express my profound gratitude to my supervisor Prof. Dr. Ajay Chandra Lal for his support and valuable guidance throughout the research.

I also would like to extend my gratitude to Basana Sapkota for guiding me as a gender expert throughout the study. I am highly grateful to external jurors Yek Raj Adhikari, Er. Kishore Kumar Jha and teachers Dr. Kirti Kusum Joshi and Dr. Inu Pradhan Salikhe for constantly guiding my work throughout different phases of presentations and helping me to be where I am.

Furthermore, much appreciation and gratitude to family and friends, for their support and amicable environment. And also, I would like to extend my sincere thanks to all personals who have lent their help directly and indirectly during my research.

ACRONYMS

MoUD: Ministry of Urban Development

UN: United Nations

SDG: Sustainable Development Goal

GESI: Gender Equality and Social Inclusion

FGD: Focused Group Discussion

KII: Key informant interview

LGBTQ+ : Lesbian, Gay, Bisexual and Transgender

NUDS: National Urban Development Strategy

UNDP: United Nation Development Program

KVDA: Kathmandu Valley Development Authority

IOM: International Organization for Migration

K.M.C.: Kathmandu Metropolitan City

IHP: Inclusive Healthy Place

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CHAPTER ONE: INRODUCTION

1.1 Background

“Urban planning and design shape the environment around us – and that environment, in turn, shapes how we live, work, play, move, and rest,” - Maitreyi Das, Manager of the World Bank’s Urban, Disaster Risk Management, Resilience, and Land Global Practice.

At present, more than 50% of the world's population resides in urban areas, and by 2050 it is expected to grow to 68% (UN-Habitat, 2020). So, the number of cities is rising faster than ever before, making them an important component of the global system.

Cities could be considered a place where an individual could live a peaceful, healthy, and prosperous life. Hence, cities should be able to accommodate the socioeconomic and gender dynamism within them, so that gender equality, women's and girls' empowerment, poverty reduction, job opportunities, and equitable prosperity can be achieved (MoUD, 2016). Despite this, cities have also resulted in persistent socio-economic inequalities, segregation, and exclusion (UN-Habitat, 2012). Inequality and exclusion are ongoing trends in cities, and especially women, who comprise over half of the population of the world, suffer from systematic gender-based discrimination (Rashied, 2020; UN-Habitat, 2020b). Sexual harassment and intimidation of women in urban public spaces is quite common (Loukaitou-Sideris, 2014; Soraganvi, 2017). The Ninth Urban Forum (2018) also acknowledged inequitable access to urban life and gender inequalities in urban economies as major challenges in cities.

In the urban context, various forms of violence against women and girls are prevalent in every country, which even extends to the online spaces(UN Women, 2017). This condition is even worse in underdeveloped and developing countries. In 2012, UN Women's "Safe City Delhi Programme" had a key finding that a significant number of women and girls felt their cities, as well as neighborhoods, were not a safe place for them. Hence, urban spaces planned and designed in a women-centric way can only help us to achieve SDG 5, target 5.1, "Eliminate all of the violence against all women and girls in public and private spaces."

This will ultimately support attaining SDG 11 of making cities inclusive, safe, resilient, and sustainable.

1.2 Need of the Research

“Men, women, gender minorities, and people of different abilities tend to use the public space in different ways,” - Sameh Wahba, World Bank Global Director for Urban, Disaster Risk Management, Resilience, and Land.

The way people live, move, work, carry out recreation activities, and rest in a city depends on the environment shaped by the urban planning and design of that city (World Bank, 2020). Its physical form determines its use (Baker et al., 2014). Due to the difference in the role of men and women in urban society, they have different ways of using public spaces. Because women and men experience and use the urban environment in different ways, they have different priorities in terms of municipal services and infrastructure, such as transportation, housing, and fundamental urban services. Such concerns are rarely addressed in the planning process. Therefore, cities planned and built in gender-neutral ways limit women and girls from exploiting the city's infrastructure and services equitably. This ultimately leads to an environment where women and girls are vulnerable to various physical and mental violations. For example, overcrowding on public transit is a worry for both men and women, but women are more insecure about sexual abuse, intimidation, and inappropriate touching. Mere thoughts of passing through urban spaces make women anxious and induce behaviors such as avoiding such places, stopping traveling alone or at night (Loukaitou-Sideris, 2014; Soraganvi, 2017; Valentine, 1990; Yavuz & Welch, 2010). With their diversity of people of various ages, ethnicities, linguistic groups, geographical locations, caste, religious, cultural, political, and economic backgrounds, urban centers are made up of roughly 50 percent women and girls and 50 percent men and boys. However, cities have been planned, designed, and governed without the equal participation of women as decision makers throughout history and to this day. So, in order to achieve an inclusive, safe, resilient, and sustainable city, women's needs and interests must be addressed, and women must be included in the planning process, whether they are policymakers or

planners. Integrating the varied experience and needs of women in urban planning and design is the likely way to achieve gender inclusivity.

1.3 Importance of Research

As this research acknowledges the women's perception of urban spaces with regard to their inclusion in the planning process itself, it attempts to fill the gap between the gender responsive spaces in the ground reality and the planning process. This research will attempt to show the reality of planning process in Nepal is inclusive or not. Therefore, this research could be important to urban planners and policy makers to incorporate the women in the planning team and enhance local women to participate.

1.4 Problem Statement

At the global level, numerous efforts have been made through several conventions and international frameworks to address gender equality. Nepal has also committed to a number of these international frameworks and has commenced multiple formal initiatives to enhance gender equality. The Constitution of Nepal, 2015 has included women's rights as a fundamental right and has also guaranteed the inclusion of women through the principle of proportional inclusion in all levels of state bodies, so that, women's participation in planning can be ensured. The Ministry of Urban Development (MOUD) has established Social Coordination Units at the ministry and its departments. Its GESI operational guidelines 2013 also attempt to mainstream GESI in urban development. Furthermore, the National Urban Development Strategy 2017 and National Policy 2007 have included gender inclusivity as one of their guiding principles. Yet, at the grassroots level, when it comes to day-to-day life, we are far behind in achieving a gender-responsive city.

As per the 2016 report by Action Aid, lack of access to public transportation, the street, public toilets, and safety and security are major concerns in Kathmandu, where perpetrators are provided a preferential environment for increased harassment in public spaces. Like most of the public spaces, Ratna Park, an open space located at the center of Kathmandu Metropolitan City, is not suitable for socialization and recreation and is characterized by

poor security and sexual harassment (City Alliance - UNOPS, 2020). Overcrowded buses in Kathmandu provide a highly favorable environment for offenders to abuse women (Neupane & Chesney-lind, 2014). Contemporary strategies such as increasing visibility, street lighting, or installing CCTV are seen being implemented for increased safety and accessibility in open spaces. But there is little evidence of its significant impact on safety perception (Navarrete-Hernandez et al., 2021). New municipalities in Nepal have a Social Development Section dedicated to addressing gender issues within municipalities. But, these have limited involvement in planning processes (ADB, 2020). Despite all these results and situations, there are limited studies conducted to attain improvement in this topic. Further, research on the assessment of gender inclusivity in local planning documents is also limited (Lozano-torres & Premio, 2021). Hence, there is an utmost need to figure out factors holding back the aim of obtaining gender responsiveness in the cities of Nepal regardless of multiple formal efforts being undertaken to internalize gender equality in planning and designing public spaces in cities.

1.5 Research Objective

It is only when the right to the city is ensured to women; they can relish the physical, economic, and social aspects of urban society. But, regardless of multiple initiatives taken in Nepal, the situation of gender inclusivity is not something to be proud of. So, the objectives of this research are:

- To explore how the Urban Spaces is being Designed/ Planned.
- To evaluate whether or not the designed space is gender inclusive.
- To evolve the strategies that would further help to plan the space that is more inclusive.

1.6 Validity of Research

With the emerging concept of creating a gender-responsive, inclusive and sustainable city, various efforts are being made at national as well as international levels. Although the space is said to be planned in Gender responsive way, the information regarding the planning process itself being Gender inclusive is not studied yet. So, this research topic shows that either our planning process is inclusive or not. Hence, the research topic holds a lot of potential, and similar research has not been carried out in our context. That is why the research seems to be valid.

1.7 Limitation of Study

The study is dependent on the key personnel's opinions. As the data collected is qualitative and subjective in nature, there may exist a great deal of bias, which might mislead the research. The analysis and results may vary with the projects. The research is only focused on gender inclusive issues. This study is limited to the case of open spaces and parks. Other urban spaces like sidewalks and streets, civic buildings, bus stations, etc., are not considered in this research.

CHAPTER TWO: CONCEPTUAL FRAMEWORK AND RESEARCH METHODOLOGY

2.1 Conceptual Framework and Methodology

This research on Gender Inclusiveness in the planning of urban spaces addresses the multiple realities as the space perceived by women is far different than that perceived by men so involving the women in the planning process will help to create gender responsive urban spaces. Therefore, the research follows the interpretive paradigm that believes that there cannot be a single reality. Interpretivism/interpretive paradigm, also known as social constructivism, entails researchers interpreting study materials incorporating human interest into a study. Interpretivism, which rejects the objectivist theory that meaning exists in the world independently of consciousness and is connected to the philosophical viewpoint of idealism, is a term used to describe a variety of methods, such as social constructivism, phenomenology, and hermeneutics. The research aligns with both method as the process would involve exploring the research and interpreting how people respond to existing nature of knowledge.

In addition, According to interpretivists, each person's interpretation of the world is dependent on their observations. This theoretical paradigm's fundamental tenet is that reality is socially produced. The interpretivist paradigm is used because the research topic deals with many realities and the knowledge is socially generated by those involved in the research process through qualitative interpretation of their interactions. Interpretivist assume that the possible way to access reality socially built) is through social constructions such as language, shared meanings, consciousness, and tools. Therefore, the ontological position of this research is that the usability and safety perception of urban space varies with its user (male and female) and male and female planner while planning differently perceives this space. Epistemologically speaking, the valid source of knowledge for this study is the direct interaction with the key personnel who are directly involved in the planning process. Also, direct interaction with users regarding their safety, services, accessibility and mobility in the urban spaces.

For the purpose of study, the research will be approached entirely through the qualitative methodological approach. The methodologies such as literature review, case studies and consultation will be carried out. To fulfill objective 1, the method used is key informant interview with the approach of interpretive where the data collected by interviewing the key personnel of planning and policy making background and interpreting the information collected. Qualitative data will also be obtained through interviews conducted with stakeholders and participants involved in the planning processes. These qualitative data shall be interpreted to understand the underlying meaning they hold with respect to our study. Objective 2 is fulfilled by carrying Stratified random samples survey of the users is carried out by using various gender friendly indicators, which are given by literature reviews. By using open-ended questionnaires regarding their perspective on gender inclusivity of urban spaces regarding safety, accessibility and mobility the information is carried out, interpreted, and analyzed.

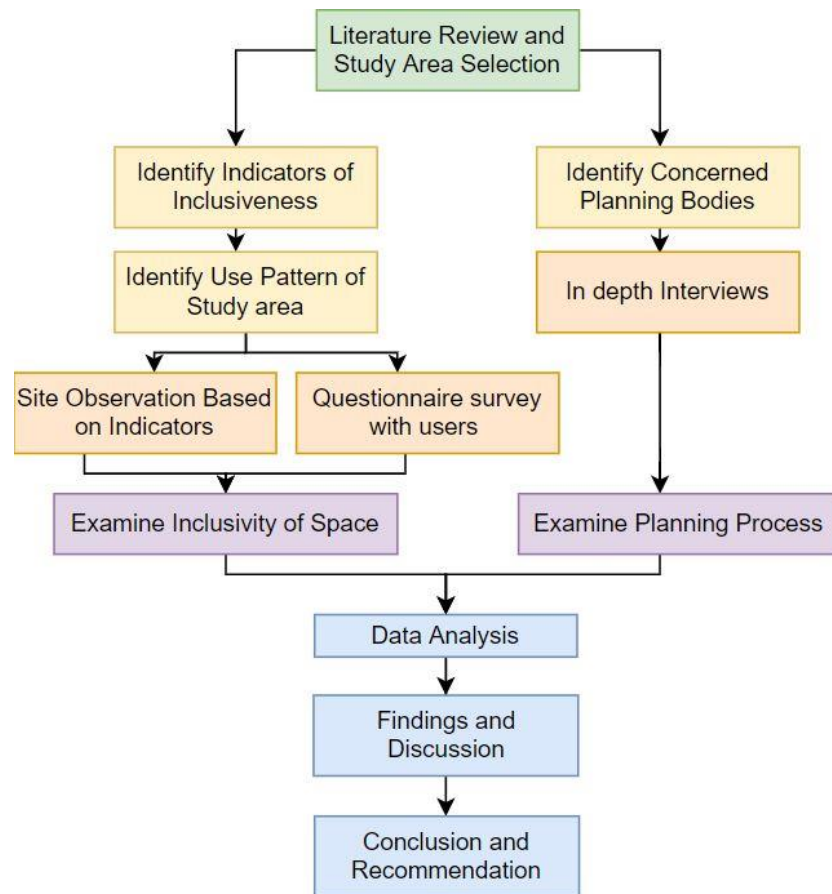


Figure 1: Research Framework

2.2 Research Methods

| Research Objectives | Research Method |
|--|--|
| To explore how the Urban Spaces is being Designed/ Planned. | Key informant interview (KII) with the designer/ Architect of both study area. Ar, Bharat Sharma (Designer of Shankha Park) Ar. Prabal Thapa (Designer of Narayanchaur) Focused Group Discussion(FGD) with the community People |
| To evaluate whether or not the designed space is gender inclusive. | Literature Review Site Observation Questionnaire Survey Focused Group Discussion |

In this research, mixed method is used to collect the data and conduct this research. A semi structured questionnaire based on simple random sampling technique is used to collect the qualitative data which measures the users perspective of the park.

Methods Used for Data collection:

- Literature Review
- Site Observation
- Questionnaire Survey
- Key Informant Interview
- Focused Group Discussion

In the two public parks, I have used direct observation to document the number, gender, age group, and activity level of park users. I also interviewed park users.

On average, over how many individuals were counted in each parks, and about what proportion. Do more males or females use the parks? Or are males or females more active? Do interviewees identify the park as the most common place where they come regularly? Are both the use and frequentation levels of individuals in the two parks interrelated with the gender identity of users?

This study concentrates on the following questions:

Who uses a park compared with those who live in the surrounding community? (Which can also show whether some groups are absent),

- How people use a park? (Which can identify whether specific facilities are being over, under, or misused)
- Why community members do (or do not) use a park? (Which can guide outreach efforts or initiatives to improve or change services) and
- What features visitors value? (which can help resolve conflicts among groups about park priorities).

Other factors, such as accessibility, availability, security, and facility quality, may have an impact on how the park is used. Studies on public parks indicate that, in addition to physical activity, utilization is likely to reflect personal preferences, age, and exercise habits. Other significant factors are the nearby land uses and the availability of planned events that attract visitors to the park.(Cohen et al., 2007)

Questionnaire Survey

It was crucial to create a survey form in order to get reliable data regarding user profiles and usage trends in the parks. For this research, some face to face interviews and questionnaire survey were done in the selected parks and for which questionnaire forms

was prepared depending upon the findings of the literature. Random sampling technique was employed for the survey in the chosen public open spaces so that the respondents represent a diverse range of ages, genders, and occupations. Their point of view on the visit and the management problems was determined. The survey provided insight into how users felt about public open spaces.

Survey of 102 people was done for Shankha park where as 60 people was done for Narayanchaur. The primary goal of the survey is to identify gender disparities that are effective in use patterns and reflections of the urban environment in order to evaluate the safety of use of urban public places.

In the interviews conducted with users of the parks and the community people, information about the following issues were asked:

- Gender and age groups,
- Educational level,
- Employment status,
- Marital status and having children.

These were followed by questions about the:

- Frequency of using parks
- Time when users come to the park and from what distance,
- Means of transportation to the park
- Main purpose of using the parks,
- Most used areas by users in each parks.

And finally other questions about the safety and security conditions of parks and related aspects followed:

- Sense of safety felt by parks users,
- Preference of being accompanied,

Key Informant Interview

The key informant interviews were loosely structured to answer the assessment questions and to gather useful insights from each informant based on his or her area of expertise. The interview guides consisted of broad open-ended questions as well as specific focused questions and were customized to each informant and used to help steer the direction of the interview. The interviewer was also free to go into more depth on any topics about which the interviewee had a lot to discuss.

CHAPTER THREE: LITERATURE REVIEW

3.1 Gender:

Gender is an analytical concept used to mark social and cultural dimensions of the concept of sex by society as men, women, and LGBTQ on the basis of perceived biological differences.

The term sex is a biological term that refers to being male or female biologically. In other words, it corresponds to a biological phenomenon. But the term "gender" refers to society's expectations and meanings that are attributed to being a male or female. In other words, gender studies do not only deal with women.

According to the United Nations High Commissioner for Refugees, gender is defined as follows:

“Gender is defined as, relationship between men and women which is based on identities loaded in one sex, status, roles and responsibilities defined and structured by society or culture. Gender is a socio-economic variable which helps to analyze the roles of women and men in any context, their responsibilities, constraints, opportunities and needs. It is not a constant or inborn, so it is structured over time as social and cultural sense.” (Hcr et al., 2002)

3.2 Gender Equality:

In order to fully exercise their human rights, contribute to and profit from economic, social, cultural, and political development and decision-making, women and men of all ages and sexual orientation must be treated equally. Gender equality is when men, women, girls, and boys, as well as the roles they play, are valued equally by society for their similarities and differences. It is predicated on the idea that men and women are equal partners in the family, the community, and society.

3.3 Gender Mainstreaming

The practice of evaluating the effects on women and men of any planned action, such as laws, policies, or programs, in all contexts and at all levels is known as mainstreaming a gender perspective. It is a method for ensuring that the concerns and experiences of both men and women are taken into account during the design, implementation, monitoring, and evaluation of policies and programs across all political, economic, and societal spheres, ensuring that both genders are benefited equally and that inequality is not maintained. Being gender equal is the ultimate goal. ¹ This requires incorporating findings from socioeconomic and policy studies related to gender into all organizational decision-making processes, including both the organization's primary policy decisions and the smaller, more routine decisions of implementation, and tracking the consequences. (White, 2010)

3.4 Social Inclusion

Social inclusion is a process by which efforts are made to ensure opportunities and access of services for all. The multidimensional process aimed at creating conditions which enable full and active participation, including inclusive accessible services of every member of society in all aspects of life, whether civic, social, economic, and political activities, as well as participation in decision making processes.

Equality & Social Inclusion ensure the ability, opportunity, and dignity of all people.

3.5 Gender Sensitive Planning

Gender-sensitive planning guarantees that gender concerns and implications found through gender analysis are addressed during the planning, design, and implementation phases. This entails creating acceptable gender equality outcomes as well as developing associated tactics and actions. Gender-sensitive planning seeks to ensure equitable opportunities and equal outcomes for women and men.

“Gender-sensitive planning uses specific methods and tools to provide women and girls more opportunities for their participation in the development process and to measure the impact of planned activities on women and men.”

3.6 Gender Sensitive Indicators:

Gender-sensitive indicators play an important role in achieving gender equality. Gender-sensitive indicators are indicators disaggregated by sex, age and socio-economic background. They are designed to demonstrate changes in relations between women and men in a given society over a period. The indicators are tools to assess the progress of a particular development intervention towards achieving gender equality. Sex-disaggregated data demonstrates whether both rural women and men are included in the programme or project as agents/project staff, and as beneficiaries at all levels. The approach allows for effective monitoring and evaluation.

3.6.1 Quantitative Indicators

- Participation of all stakeholders in project identification and design meetings (attendance and level of participation/contribution by sex, age, and socio-economic background).
- Degree of rural women's and men's inputs into project activities, in terms of labor, tools, money, etc.
- Benefits going to women and men, by socio-economic background and age.

3.6.2 Qualitative Indicators

- Level of participation as perceived by stakeholders through the different stages of the project cycle (by sex, age, and socio-economic background).
- Degree of participation of an adequate number of women in important decision making (adequacy to be mutually agreed by all stakeholders) — to be measured through stakeholder responses and by qualitative analysis of the impact of different decisions.

3.7 Right To city for women:

According to French philosopher Henri Lefebvre, "The right to the city is achieved by living in the city and having access to two components of everyday life: the right to use urban space, and the right to create it." The gender wage disparity, the higher proportion of women in low-paying service sector occupations, the prevalence of sexual harassment, and the limited mobility of women in the city all show that women do not yet have the right to the city. Women must work together to realize their collective claim to the city. A paradigm shift in terms of the processes of policymaking and citizen education for making full use of the city's public goods and services is necessary for women to play a part in their cities' stories.(Nelischer, 2022)

3.8 Urban Space:

The urban space refers to several urban areas and their related multicentric municipalities forming a whole in a single stretch. Urban space is characterized by size, shape, scale, density, land uses, building types, urban block layout and distribution of green space. Market places, city squares, public open spaces / parks, civic buildings, sidewalks and streets, transport hub/ bus stations etc. are some urban spaces.

3.9 Public Open Space:

"Public spaces should be responsive, democratic, and meaningful ..." (S.F, 1992:1995)

Public space is a free access place where everyone is free to engage in a wide range of activities. Health, economic value and social connection are just a few of the advantages that physical features and activities in public open spaces provide for quality of life. With such considerable improvements to the quality of life, public open space is now facing challenges in metropolitan areas around the globe, such as the growing rate of urban environment change and the declining utility of public open space.

Carr offers a definition of public space as a center of communal life, as *"The common ground where people carry out the functional and ritual activities that bind a community, whether in the normal routines of daily life or periodic festivities"*

Oxford dictionary provides the following definitions: Public: open to or shared by the people; Open: not closed or blocked up, allowing entrance or passage or access to public; and Space: interval between points or objects, area.

Public areas provide information on the socioeconomic state of the city and also display local culture. The following characteristics should be taken into consideration when designing public areas that are available for community usage and service.

A successful public space should,

- Be easily accessible and visible
- Have aesthetic appeal
- Be maintained easily and economically
- Be safe. (Clare Cooper Marcuss, 1990)

Common living areas for all individuals with varying incomes, levels of education, and cultural backgrounds, as well as networks of relationships, should be provided in public areas of cities to ensure security.

According to the National Urban Development Strategy (NUDS) published by the Ministry of Urban Development (MoUD), urban open spaces and parks serve many functions. They act as the lungs of a city and provide space for breathing. By providing space for social interaction and recreation, these open spaces improve the city's social, physical, as well as psychological well-being, making the city livable. Additionally, these spaces can also be used as emergency shelters during disaster periods.

3.9.1 The importance and Benefits of Public open spaces:

In 2015, UN-Habitat released a Global Toolkit for Public Space where they listed a set of arguments on why advocating for high-quality public spaces should be a priority for all cities:

- Public space is the banner of urban civility
- Public spaces are our urban commons
- Public spaces promote income, investment and wealth creation

- Public spaces enhance environmental sustainability
- Public space increases transportation efficiency
- Public space improves public health
- Public space enhances urban safety
- Public spaces promote equity and social inclusion
- Public spaces are tools for gender and age-friendly cities
- Public spaces offer ideal opportunities to generate citizen involvement
- Public spaces make for great cities

3.9.2 Interaction between gender and urban public space

Rapid and unplanned development led to growing gender disparities in the utilization of public spaces in cities. Women's engagement in urban life is, for instance, limited by inadequate street lighting. Women's engagement in urban life is further limited by gender-insensitive planning and designing processes due to security issues.

Urban gendered spaces are areas of a city where one sex predominates. According to Daphne Spain's argument in *The Importance of Urban Gendered Spaces for the Public Realm*, the presence of female gendered spaces is thought to be beneficial to the participation of women in urban life by offering them a safe environment outside of the home where they can establish their independence and create a separate identity from their families. According to Daphne Spain, voluntary gender segregation at the urban scale has the potential to increase women's access to the public sphere as opposed to only reducing it in regions where segregation is required. (Spain, 2008)

But on the other hand Jane Rendell, in "Introduction: Gender Space", indicated some propositions to describe how gendered space can be produced:

- “•through architectural design according to the sex of the architects,
- through the interpretive lens of architectural criticism, history and theory,
- through using, occupying and transforming everyday activities” (Rendell, Jane, 2003)

She made a point of highlighting how crucial representation is in creating gendered space. The concept of the "separate spheres," an antagonistic and hierarchical system made up of a dominant public male realm of production (the metropolis) and a submissive private female realm of reproduction, is the most common image of gendered space (the home). She said that this mentality, which separates the city from the home, the public from the private, and men from women, is both patriarchal and capitalist.

There is a difference between sexed and gendered space, in which locations may be "sexed" based on people's biological sex, as in restrooms, for example, or gendered based on the gender associated with the various kinds of activities that take place there, for example, a kitchen is gendered feminine because cooking is an activity that is socially associated with women. By making this distinction, Jane Rendell highlighted the contrasts between the concepts of "sex," which takes into account biological variations, and "gender," which refers to societal issues. Therefore, the idea of "gendered space" encompasses perspectives on space as a social good that can be used by gender. (Rendell, Jane, 2003)

3.9.3 Qualities of Public Space:

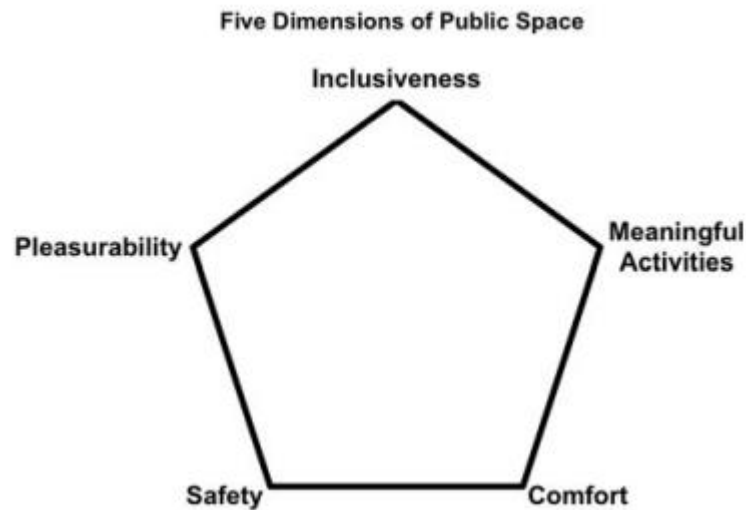


Figure 2: Qualities of Public Space

Source: (Mehta, 2021)

3.9.3.1 *Inclusiveness*

Public space is a space of participation. It is a place for the collective voice and shared interests, but it is also where the disputes and disagreements between diverse groups are expressed. According to Mitchell (2003), a group's appropriation and use of a space to meet its purposes renders it public. Therefore, it may be argued that the degree of a space's inclusivity is only made apparent when activity occurs there. Additionally, a public space's inclusion may depend on the variety of activities it can accommodate and the actors it can host.(Mitchell, 2009)

3.9.3.2 *Meaningful Activities*

People have a purpose to visit public spaces and spend their time there because of the activities that take place there. Socialization is boosted through group activities, which promote a variety of informal and social activities as well as physical ones. Activities should take into account various age groups, genders, and the elderly. (Karacor & Akcam, 2016) The actions of people draw in other people, and public areas with entertainment options may do the same, according to Gehl (2011). People like to spend time in public areas if there are things to do there. More than just walking and sitting, there are things to do, activities to engage in, and opportunity to do them.

3.9.3.3 *Comfort*

If a place is comfortable, it will be used. People frequently prioritize perceptions of a place's character or charm, safety and cleanliness, the context of nearby buildings, and those factors, as well as more concrete concerns like having a pleasant spot to sit. In general, individuals undervalue the significance of having the freedom to choose where they sit.(*Four Key Qualities of a Successful Place - Placemaking Chicago*, 2016.) People like to stay and spend longer time in public settings that provide some level of comfort.(Holland et al., 2007) Special occasions attract attention and enhance the allure and attractiveness of locations.

3.9.3.4 Safety

Safety is often cited as the first concern in public spaces. Several environmental characteristics affect the real and perceived safety of public space. A sense of safety may be achieved using explicit means and controls, although some suggest that over-securitization and policing can itself make the space perceptibly unsafe. Alternatively, a feeling of safety may be achieved simply by the constant presence of people and ‘eyes on the street’ where the space become self policed. In the context of public space, safety is a person’s ability to feel safe from the social and physical factor, from crime and traffic.

3.9.3.5 Pleasurability

Spaces becomes pleasurable when they are imageable and have high level of spatial quality and sensory complexity.

3.10 Inclusivity/ Inclusive City

A safe city is one that promotes the elimination of gender-based violence, while at the same time promoting equal opportunities for men and women in all the spheres of social, economic, cultural and political life (access to employment, education, political participation, resources and leisure, etc.).

According to Cambridge Dictionary inclusiveness is “the quality of including many different types of people and treating them all fairly and equally”

Inclusivity means to be open to everyone and not limited to certain people. In regard to gender, it means that services, establishments, schools, Government agencies and other institutions are welcoming all, regardless of their gender identity or expression.

Inclusive cities are those where everyone can reap the benefits of urbanization equally. As cities grow people start to drift apart in terms of benefits gained. To close that gap inclusion must be promoted in cities design as well. Walking as a medium of transportation is one

of the step towards inclusive city. Inclusion in cities can be promoted in three ways: Spatial Inclusion, Social Inclusion and Economic Inclusion. The United Nations has defined the Inclusive City as a place in which everyone, irrespective of their financial circumstances, gender, race, ethnicity, or religion, is empowered to fully engage in the social, economic, and political opportunity that cities have to offer and it does this by supporting growth with equity (UNDP, 2011). New Urbanism movements advocates urban designs that are more pedestrian friendly than previous developments.

3.11 Guiding Principle

Creating Inclusive Healthy Places (Gardner et al., 2018)

3.11.1 Community Context

Recognize and comprehend the local context through gathering knowledge of the resources, conditions, and lived experiences that are relevant to health equity.

3.11.2 Inclusion Process

By encouraging civic trust, varied involvement, and social capital, advance equity and inclusion. Meaningful involvement and continuing inclusion are based on building civic trust.

3.11.3 Inclusive Design and Program

By raising the quality, expanding accessibility and safety, and encouraging diversity, public spaces can be designed and programmed for health equity.

Everyone's health and wellbeing depend on parks, recreational places, and natural settings. The level of community health in the area of a park is indicated by its quality, programming, and recreational opportunities. Any specific park or park system's quality and usage are understood by an inclusive healthy design in order to direct and inform inclusive transformation.

3.11.4 Sustaining Inclusion

By fostering representation, agency, and stability, local communities will be better able to adapt to long-term change and maintain their social resilience. Communities and park systems are dynamic and inclusive, and parks and recreation systems adapt to and take advantage of changing conditions. Evaluation makes that IHP parks and recreation prioritize diversity and inclusion and advance community needs.

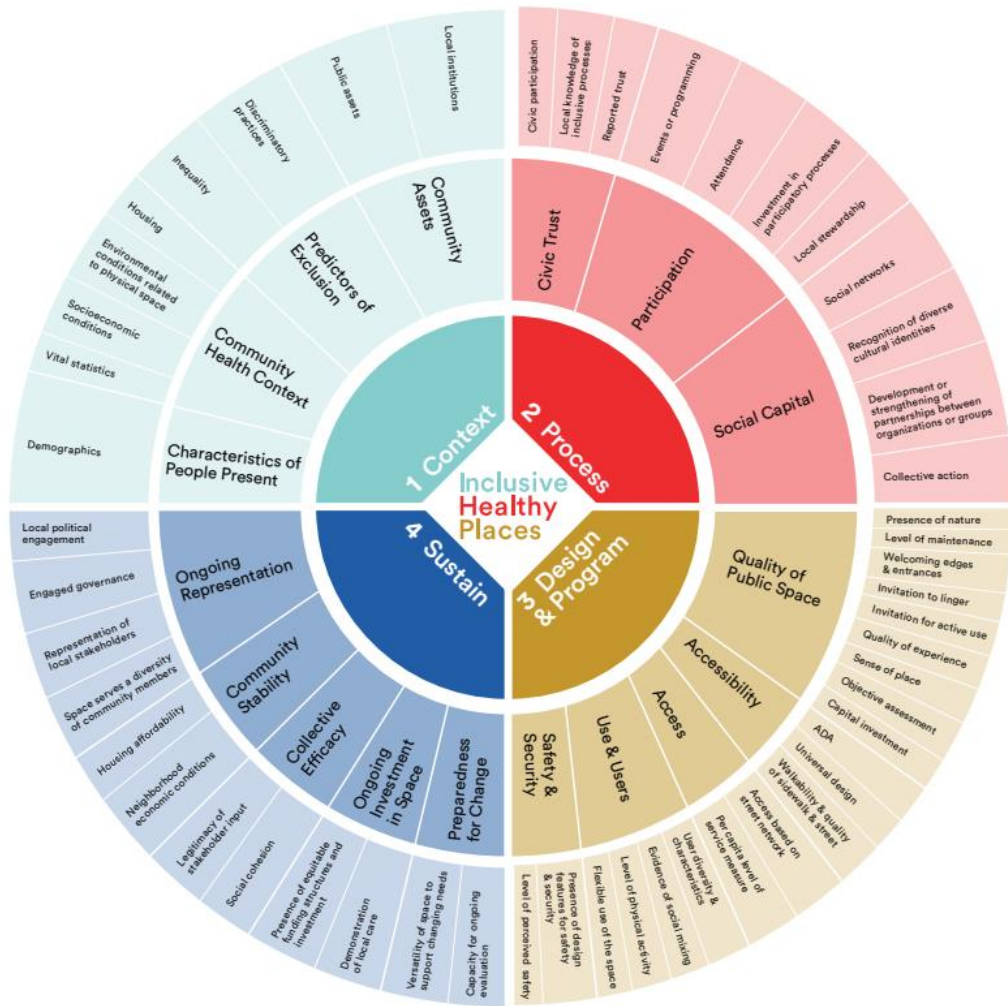


Figure 3 : IHP Framework

Source: (Gehl Institute, 2018)

3.12 Principles of Gender Inclusive Planning:

The lack of representation of women, girls and sexual and gender minorities of all ages in decisions that shape the built environment they are living in is creating the city which excludes their need and way of living. According to The World Bank report on “Gender inclusive Urban Planning and Design”, In order to achieve the ultimate goals of creating inclusive cities, Designers and planners should follow the following principles: (Terraaza et al., 2020)

3.12.1 A participatory Process

Gender inclusive planning process should bring the voice of women, girls and sexual and gender minorities in decision-making and engage them throughout the process of Monitoring, Evaluation, Accountability and Learning. Project should be driven by locally identified priorities which should also include priorities of women, girls and sexual and gender minorities of all age group.

3.12.2 An Integrated Approach

Gender inclusive planning process should integrate community people “on-the-ground” with the government level policy and actions that will ensure sustainable impact in promoting vertical communication and collaboration. Community and government partners should be brought together to define the goals and methodology, carry out project activity and evaluate project success.

3.12.3 The Principle of Universal design

Gender inclusive planning process should adopt the principle of universal design, which support to create a built environment that meets the need of people who wish to use it regardless of their age, race, ethnicity, class, sexuality and gender identity. Universal design promotes accessibility, equitable and flexible use, minimization of physical effort and hazards and appropriateness of size and space for approach and use.(NC State, 1997)

3.12.4 Knowledge Building

Gender inclusive planning process must be properly evaluated with Monitoring, evaluation, accountability and Learning based on gender-disaggregated indicators. The process of data collection should itself include women and sexual and gender minority beneficiaries, so that their effort and experiences shape the framework and they can learn and advocate for their interest based on the knowledge that is generated.

3.12.5 Power Building

Gender inclusive planning process should offer an opportunity for women and sexual and gender minorities to build their capacity so that they can effectively collaborate with the government actors and participate in decision-making process to shape the built environment. This will lead to capacity building workshops, trainings, and formation of leadership committees.

3.12.6 Investment

Planning and designing with gender equality in mind involves more than just making a few tweaks or additions to the design and implementation process. To get results, they need a fundamental realignment of resources and mindsets. It takes more time, knowledge, and resources to consciously create gender principles and carry out objectives in project procurement and execution than simply having female beneficiaries in the catchment area. So gender inclusive design is more invested in committing the necessary finances and expertise to follow through on intentional gender equity goals.

3.13 Inclusivity of Public Space

To understand if a public space is well-designed and gender-inclusive or not, the following measures are used to evaluate existing public spaces as given by Handbook for Gender Inclusive Urban Planning and Design. (Soraganvi, 2017)

3.13.1 Infrastructure and Comfort

In this part, the infrastructure of the public spaces are analyzed. The answer of following questions are to be gathered to evaluate the level of inclusivity.

- Are there well maintained and adequate public toilets for both men and Women?
- Are there ramps to access by physically disabled people?
- Are there the rubbish bins throughout the public space?
- Are there the place to sit and rest?
- Is there adequate shade?
- Are there vendors or kiosks?

3.13.2 Connectivity

- Is the public space easily accessed from the surrounding neighborhood?
- Are there the sidewalks surrounding the public space?
- Are there transit stops located nearby for enhanced connectivity?
- Is there adequate directional signage within the space?

3.13.3 Public safety

- Are there the clear sight lines within the public space? Is the interior of the space visible from the street or entrance?
- Is there the overgrown or non-maintained vegetation that hinders visibility?
- Are there fences or walls that blocks clear pathway to exits?
- Is there any visible policing? If so, when are they on duty?
- Are there people or group of people that makes women feel unsafe?
- Is there the presence of Alcohol or Drug Dealing?

3.13.4 Occupancy

- Are there people using public space, and at what time?
- What types of activities are people engaged in?
- What are the areas that people are using the most?
- Is there a mix of men, women, girls and boys using the public space? What ages?

- Is the space accessible to people with disabilities?

3.13.5 Lighting

- Are the existing lights in working condition?
- Are the lights distributed evenly so all part of public space are well lit?

CHAPTER FOUR: STUDY AREA

For this study, two cases of Public open space are taken whose planning team and process will be analyzed and is tested against various gender inclusive indicators to find whether the space designed is gender inclusive and or not. Among the various urban public spaces, both case is limited to open spaces because open space is a free space where everybody could move around without any hesitation. Although Shopping Mall is also a public space, it does not serve as a free space, it mostly invites the people with high economic background, and most importantly, it was constructed for the business purpose. Also taking both the cases of open space would help to compare between both cases.

4.1 Case 1: Narayanchaur

Narayanchaur is a public open space, which is located at Naxal in the Northeast part of Kathmandu valley inside the ring road. It covers an area of 26-10-0-1 ropanies as mentioned in the list of gazette open spaces. The site is under the ownership of Kathmandu metropolitan city (International Organization for Migration (IOM), 2020). The surrounding area has a high traditional and cultural significance with historical Narayanhiti Palace Museum, located on the west side and Nagpokhari Pond on the south side of the proposed site. A vegetable market and Shankha Kirti Mahabihar occupy the east side of the site. The proposed site is surrounded by a number of banks, financial institutions, corporate buildings, police headquarters, and high-profile mansions residence. Due to the diversity of land use around the area, the locality usually remains busy and mobile most of the time.(KVDA, 2015)

Narayan Chaur also known as Nandi Keshwar Bagaicha during 6th Century is a park with historical importance. Historically, park was a garden from where the flowers were offered to the adjacent Nandi Keshwar Temple, hence the name Nandi Keshwar Bagaicha. Then queen Subarna Prabha Devi (second wife of Rana Bahadur Shah built the “Nandi Keshwar” Temple in B.S. 1858. But later, it turned into an open garbage disposal site with grotesque view and nuisance smell. In 2012, the restoration process of the park began. The park was designed by Parbal Thapa Architects and the masterplan of Narayan chour was presented

to Kathmandu Valley Development Authority (KVDA) in 2013 and it was opened to public a few months before earthquake.



Figure 4: Narayanchaur Aerial View (Source: Google Earth)



Figure 5 Narayanchaur



Figure 7: Plan of Narayanchaur

Elements of Park and Their Use:

Access

To facilitate accessibility, 3.5 m wide footpaths, with trees on both sides, has been constructed around the site using interlocking concrete block. Four access point/ gates at north, south, east and west direction connects the footpath with the Park. The access point is provided with steps and two ramps, which lead to the park making it accessible for all.



Figure 8: Entry way to Narayanchaur

Walkways:

Four access point of the park leads to the inner walkways of the park, which surrounds the central green space all around. 2.5m wide walkways with trees in both side are mostly used for jogging purpose.



Figure 9: Narayanchaur walkway

Central Green Lawn:

An oval shaped Narayanchaur consists of central area of the space which has been left open as green space. The space serves for multipurpose use where people enjoy to gather and sit. It was also used as post disaster recovery after 2015 earthquake.

Source:(Prabal Thapa, 2013)



Figure 10: Central Green Lawn



Figure 11: Narayanchaur During Earthquake 2015

Sitting Space:

Sitting areas have been created along the walkways of the park which faces towards walkways and towards central green lawn. The benches provided are sufficient and are placed at regular interval. There is the provision of dustbins nearby the benches.



Figure 12: Narayanchaur Central Green Lawn

Mounds:

Four grass mounds of approximate height 1.8m are created on the four corner of the park. These mounds functions as the insulation between the garden and the noise of the traffic outside the park. These mounds also blocks the unwanted traffic views, provide aesthetic look and divert the sound coming from surrounding traffic.



Figure 13: Narayanchaur Mounds

Children Play area / Calisthenics Park:

Calisthenics park along with some children's playing equipment are placed on the southern side of the park. Children's playing equipments are not well maintained and in working condition. Calisthenics park is in good condition and mainly mostly used by boys of age group 15-25 and and <15 years.



Figure 14: Narayanchaur Calisthenic Park

4.2 Case 2: Shankha Park

Shankha park is located at northern side of Kathmandu. The park has a 10,751 sq. m. area and is situated in Chhappal Karkhana, Kathmandu. It was established in 2042 B.S. to commemorate Panchayat Silver Jubilee also known as Panchayat Silver Jubilee Park. It was inaugurated by King Birendra. Landscape architect Bharat Sharma did the design of the Park. Both hard and soft landscape can be found in the park. The park is owned by K.M.C. and the catchment of the park is Boudha, Chabahil, Bishalnagar, Dhumbarahi, Baluwatar, Maharajgunj and Bansbari areas. Sankha Park serves as a breathing space apart from the city's bustle. (*Shankha Park - Kathmandu Open Spaces*, n.d.)

In the middle of the park's multi-level lawn area is a pillar with Sankha seated atop it. The southern portion is a play area for kids with blocks laid out on the ground, and the northern portion is a temple space with exercise equipment. There exists only one entry access to the park which has a gate and security guard. The park opens at 5a.m. and closes at 7 p.m.

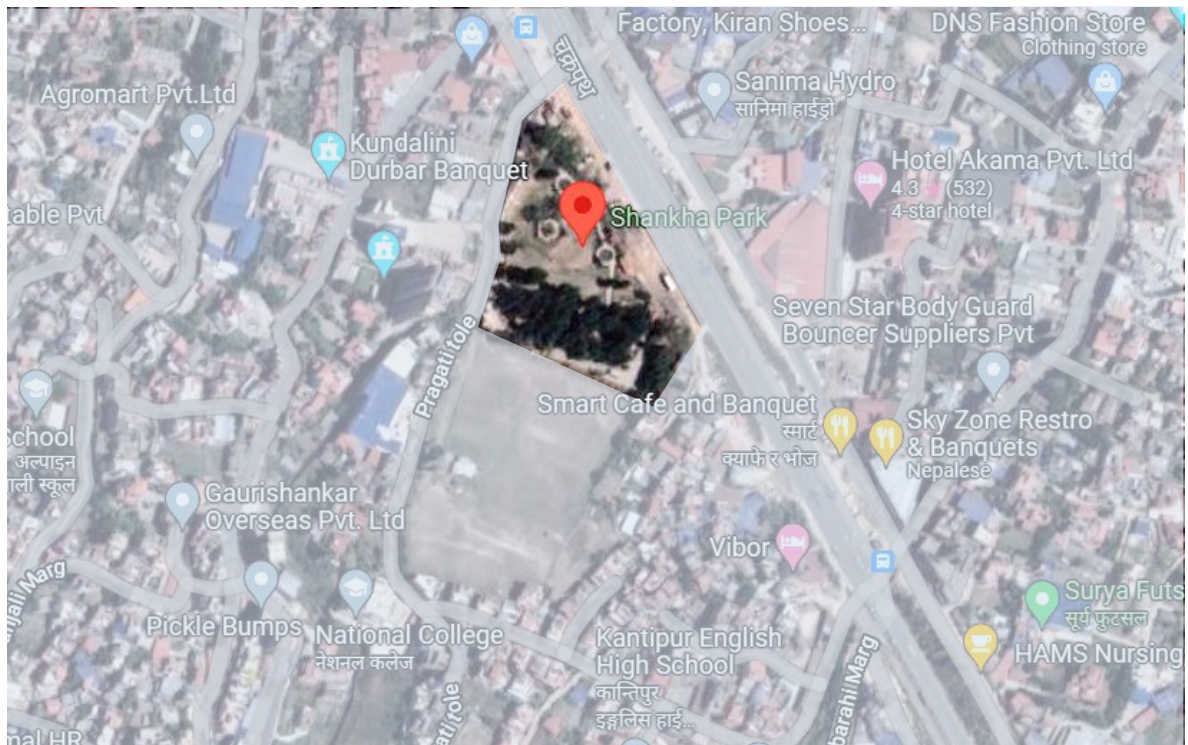


Figure 15: Shanka Park Aerial View (Source: Google Earth)

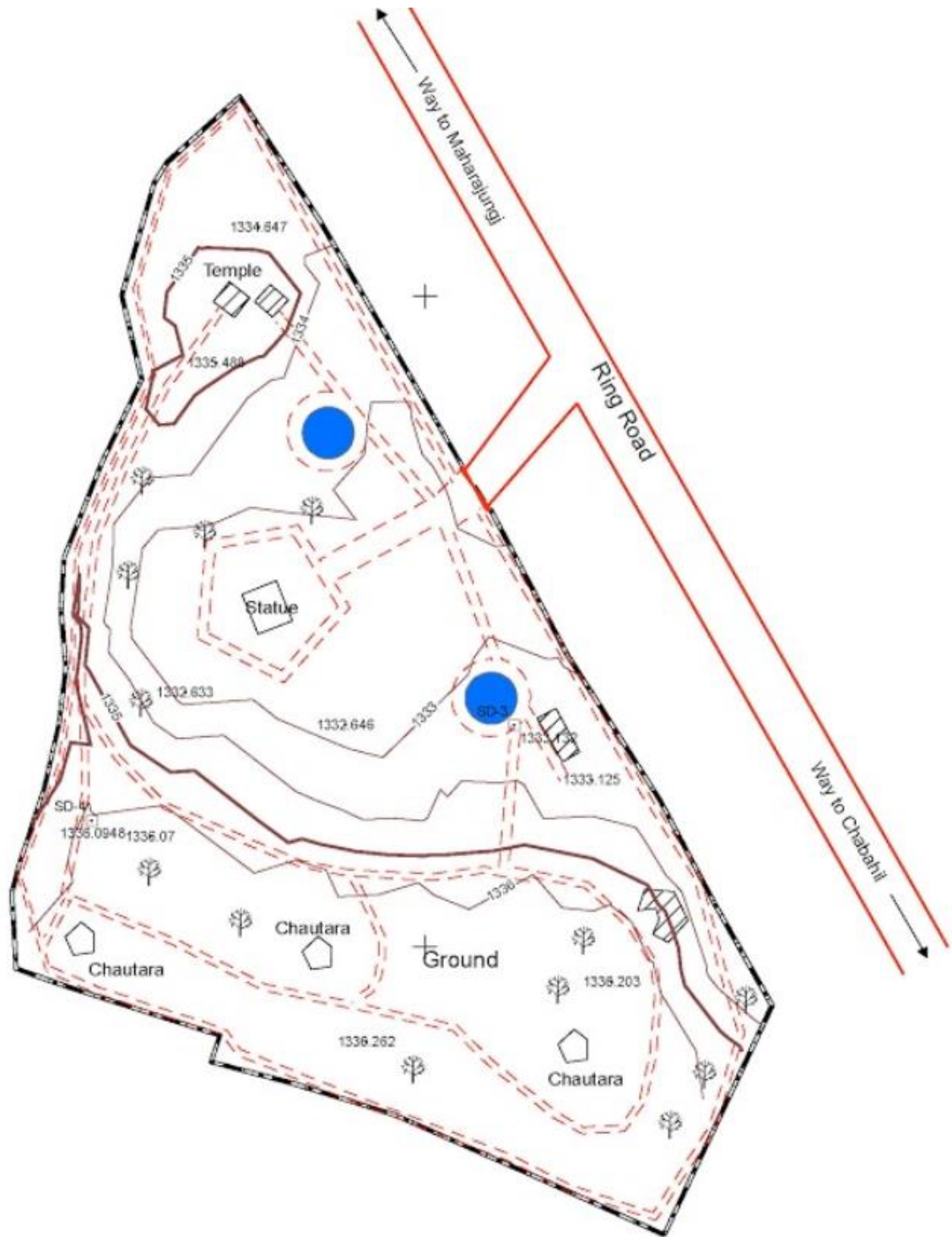


Figure 16: Plan of Shankha Park

Source: (Shankha Park - Kathmandu Open Spaces, n.d.)

Elements of Park and Their Use:

Access and Parking:

The Shankha Park lies at the western side of the ring road at Chhapal Karkhana. So the park is directly accessible from the ring road. The park is fenced all around and provided with one entrance gate at the eastern side of the park. The front of the gate is used as parking space and the space for vendors as well. The park is accessible by stepping down from the road level. Only steps are provided at all part of the park. So due to lack of ramps, the park is not accessible for physically disable people.



Figure 17: Shanka Park Entry Gate and Parkings

Amphitheatre:

Semicircular shaped amphitheater with the green grass serves as multipurpose space of the park. It is located centrally and surrounded by the walkways all around. This space is used as sitting space, play area for children.



Figure 18: Shanka Park Amphitheatre

Covered seating space:

These covered seating spaces are placed at the southern part of the park with in the tree Garden. In total, three-covered seating space are provided, which are mostly used for seating and relaxing. It serves as the shading space during rainy and sunny days.



Figure 19: Shanka Park Covered Seating Spaces

Outdoor Gym:

The outdoor gym is placed in the southeastern corner of the park where various equipment for physical exercise are placed. This space is mostly used during morning for physical exercise. The open space in this area is also used to play badminton.



Figure 20: Outdoor Gym Area

Children's Play area:

The children's play area is placed in the southwestern part of the park where various playing equipment of children are placed. The children of age group 3-10 years old mostly use this place.



Figure 21: Children Play area

Pati and Temple Area:

This area is placed on the northern corner of the park. Two temple of Lord Shiva and Ganesh can be seen in this area. Along with the temple, one resting space “Pati” is also placed there which is mostly used by the elderly people visiting the park.



Figure 22: Temple of Lord Shiva and Ganesh



Figure 23: Pati Near Temple

CHAPTER FIVE: DATA AND ANALYSIS

Data collection is done using various methods such as site observation, questionnaire survey, Key informant interview and Focused group discussion.

5.1 Planning of the Park

5.1.1 Shankha Park

The Shankha park at chappal Karkhana was designed by Ar. Bharat Sharma with the concept to blend the site factors and use factors. Also the paradigm of unification of Nepal was shown with focal stone stumbha with conch on the top. It was designed and implemented to commemorate Panchayat silver jubilee around B S 2042 on vacant public space. Architect Bharat Sharma was the only person involved in the design of the Shankha Park and community people were also not involved because in those days, there was no question of Participatory Planning in Practice. The park was designed to facilitate all the people with free access. According to Ar, Bharat Sharma, the park was designed to facilitate people of all age group. Since, Peoples or Community participation and Gender was non issue and also Nepal government did not have any priority for the gender issue at the time of Designing, the design of the park was expert led design without involving the community people.

5.1.2 Narayanchaur

Community Service Center- Naxal initiated the Revival of Nandi Keshwor Bagaincha, Narayanchaur with the scope of providing a dynamic public space that pays homage to local history; promotes citizen engagement, provides environment benefit to the community and develops the open field as a Digester Risk Management Park. Prabal Thapa Architects did the design of the park with a concept of converting the open land into a multipurpose Park. According to Designer Ar. Parbal Thapa, 6 points were given to them by community service center which has to be achieved after designing the park which are mentioned as follow:

- Cater the need from a child to an elderly people

- A Health Park which can be used by people from all facet of lives for leisure, morning/evening walk, children playground etc.
- Preserve cultural heritage.
- Make it a unique example of a Minimum Maintenance Park.
- Design the park to make a Positive Environmental impact o Ground Water Recharge. o Oxygen Supply. and above all
- Incorporate the park as Disaster Risk Management zone.

Architect Parbal Thapa along with Architect Liza Pradhan designed the Park. The stakeholder for this projects were the community people of Naxal. This design of park was community Led design technically supported by the experts. While designing the park, the designers were conscious about the gender so the private corners are minimized in the design and all the part of the park are cleayly visible for safety purpose. The park was designed such that people of all age group from child to elderly people can enjoy the park.

5.2 Site Observation

This method of data collection was carried out by visiting the particular public space/park on various time of weekend day and weekdays. The park was visited 3 times a day: in the morning time at 6:00 am, daytime at 2:00pm and Evening at 6:00 pm. The composition of the visitors and use of the various part of the park is observed. The site observation is also focused on the various aspects of Inclusive spaces, which are as follow:

- Infrastructure and Comfort
- Connectivity
- Public Safety
- Occupancy
- Lighting

| Aspect s of Inclusi vity | Variables | | Shankha Park | Remarks | Narayanchaur | Remarks |
|--|--|-----------------------|-----------------|---|--------------|---|
| Infras tructu re and Comfo rt | Presence of Ramps for Physically Diabled People | Yes / No | No | Park lies below the road level and it is connected by the steps only | Yes | 2 ramps in each entry point. In total 8 ramps are provided |
| | | | | | | |
| | Well maintaine d and adequate Public Toilet | Free / Not Free | Not Free | | Not Free | Toilet lies outside the park which is not free. |
| | | | | | | |
| | Rubbish Bins | Yes / No | Yes | Dust bins are placed at different location of the park but its is not sufficiently placed. | Yes | Along the walkways |
| | | | | | | |
| | Place to sit and Rest | Yes / No | Yes | | Yes | Along the walkways |
| | | | | | | |

| | | | | | | |
|---------------------|---|-------------|-----|---|-----|---|
| | Climatic comfort of the space- Shade and Shelter | Yes / No | Yes | 3 nos. of covered sitting spaces are provided | No | |
| | | | | | | |
| | Vendors or kiosks | Yes / No | Yes | Vendors are seen in the morning and the evening in week days and all day in the weekend | No | |
| | | | | | | |
| | Lights | Yes / No | Yes | | Yes | |
| | | | | | | |
| | Presence of posted signs to exclude certain people or behaviors | Yes / No | No | | No | |
| | | | | | | |
| Connectivity | Easy access | Yes / No | No | Only one access in the ring road side and footpath | No | Main road with high speed vehicle all around the park makes |

| | | | | | |
|---|----------|-----|-------------------|-----|----------------------|
| | | | are not provided. | | the access difficult |
| | | | | | |
| Are sidewalks surrounding the Public Space? | Yes / No | No | | Yes | |
| | | | | | |
| Do people take designated path to go where they want to go or are people consistently walking off paths for more convenience? | Yes / No | Yes | | Yes | |
| | | | | | |
| Nearby stops for enhanced connectivity? | Yes / No | Yes | | No | |
| | | | | | |

| | | | | | | |
|----------------------|--|----------|-----|--|-----|--|
| | Adequate directional signage | Yes / No | No | | No | |
| | | | | | | |
| Public Safety | Clear sight lines within the public space? Is the interior of the space visible from the street or entrance? | Yes / No | No | Most of the part of the park are visible only when we enter to the park. | Yes | |
| | | | | | | |
| | Overgrown or non-maintained vegetation that hinders visibility? | Yes / No | No | | No | |
| | Are there fences or walls that blocks clear pathway to exits? | Yes / No | Yes | | No | |

| | | | | | |
|---|----------|------------|--|---------|--|
| | | | | | |
| Is there any visible policing? | Yes / No | Yes | | Yes | |
| | | | | | |
| If yes, when are they on duty? | | 9am to 6pm | | 24 hour | |
| | | | | | |
| Are there people or group of people within the park that makes women feel unsafe? | Yes/ No | No | | No | |
| | | | | | |
| Is there the presence of alcohol or drug Dealing? | Yes / No | No | But, sometimes people having alcohol can be seen in the park | No | |
| | | | | | |

| | | | | | | |
|------------------|--|------------------------|---------------|--|---------------|---|
| Occupancy | Are there people using public space? And at what times? | Yes / No | Yes | Most of the people use the space during morning and evening. Some of them use during day time as well. | Yes | During morning and Evening only. At the day time, the park is almost empty |
| | | | | | | |
| | What types of activities people are engaged in ? | Physically active | Mix | | Mix | Physically active activities during morning and mostly sedentary during evening |
| | | Sedentary recreational | | | | |
| | | Mix | | | | |
| | | | | | | |
| | Are people using the space to stop and rest, or are they passing | | Stop and Rest | | Stop and Rest | |

| | | | | | | |
|-----------------|--|----------|---|--|------------|--|
| | through it? | | | | | |
| | | | | | | |
| | What are the areas that people are using the most? | Mention | Different area are used by different group of people. | Detail of this is shown in the survey. | Green Lawn | Detail of this is shown in the survey. |
| | | | | | | |
| | Is there the mix of men, women, girls and boys using the public space? | | Yes | | Yes | |
| | What ages? | | | | | |
| | Is the space accessible to people with disabilities or with special needs? | Yes / No | No | Physically disabled people cannot access to the park due to the lack of ramp | Yes | Ramps are provided |
| | | | | | | |
| Lighting | Existing lights in | Yes / No | No idea | Because the park is | Yes | |

| | | | | | | |
|--|---|----------|----|---------------------------------------|-----|--|
| | Working Condition | | | closed before the lamps are turned on | | |
| | | | | | | |
| | Are lights distributed evenly so all part of the Public space are well Lit? | Yes / No | No | | Yes | |

5.2.1 Observation and Counting in Shankha Park

Morning time 6:00 am

At the morning time, the park is mostly used for jogging, physical exercise, Zumba and for yoga purpose. While counting the people in the park, in total of approx. 270 people were in the park from 6:00 to 6:30 am among which 90 were female and 180 were male. Which shows that 33.33% of total users were female.

The various age group of people can be seen in the park and various part of the park is used by various group of peoples such as, the tree park with Chautara is used by the Zumba group with majority of female of age group 25-40. The Pati is used by the group of women for yoga.

In Outdoor Gym area the both men and women can be seen among with the majority of men. Women of age group 40-60 can be seen the most. Walkways are mostly used for jogging purpose and most of the users are men.

Daytime 2:00 pm

At the Day/Noon time, the park is mostly used as a resting space by the users. The space with trees and covered seating provide a cool space to overcome the hot climate. While counting the people in the park, in total of approx. 200 people were in the park from 2:00 pm to 2:30 pm among which 60 were female and 140 were male. WhiThech shows that 30% of total users were female.

Majority of people of age group 60+ can be seen around temple and pati areas at this period of time. Female users can be seen in the outdoor seating area around the tree park and Chautara with their friends and family member engaged in their own work.

Evening at 6:00 pm

In the evening time, most of the people coming the park are seen to be spending their time seating with their friends and family members. Peoples were also playing with their kids. The people visiting the park on the evening are mostly the community people living nearby and some of them also come from a distance using their own private vehicles.

While counting the people in the park at 6 o'clock in the evening, in total of approx. 150 people were there in the park among which 110 were male and 40 were female. Which shows 26.27% of total users were female.

Saturday

The morning time of the Saturday is same as the morning time of other weekdays ie. There is no significant difference in the number of people visiting the park. But, after 2 o'clock, the number of people visiting the park increases, flow of people increases.

While counting the people in the park at 4 o'clock, in total of approx. 490 people were there in the park among which 230 were female and 270 were male. Which shows that 46% of total users were female. The various age group of people can be seen in the park and various group of peoples uses various part of the park. Most of the people can be seen in the central green space spending time with their friends and family.

On the Saturday, the park is also occupied by not only the community people, but park is also occupied by the people coming from far away for refreshment purpose. The private

vehicles / motorbikes occupy the Front part of the park on the Saturday. According to Mr Harisharan KC – Site office Head of Shankha Park approx. 2000 people visit the park on Saturday while only 800-1000 people visit the park on the weekdays.

The captured photographs on different time and different day of the Shankha Park are shown in the annex below.

5.2.2 Observation and Counting in Narayanchaur

Morning time 6:00 am

At the morning time, the park is mostly used for jogging, physical exercise purpose. While counting the people in the park, in total of approx. 65 people were in the park from 6:00 to 6:30 am among which 15 were female and 50 were male. Which shows that 23.07% of total users were female. In the morning, mostly the people of age group 25-60 and 60+ use walkways for jogging and Calisthenics park is used by the youth group of people of age group 15-25.

Evening time 6:00 pm

At the evening time, the people for sitting and gathering purpose mostly use the central green lawn of the park. While counting the people in the park, in total of approx. 60 people were in the park from 6:00 to 6:30 am among which 22 were female and 38 were male. Which shows that 36.67% of total users were female. People of age group 15-25 and 25-40 are seen sitting in the lawn, children are seen running in the ground, people of age group 40-60 and 60+ are seen walking around the walkways and youth of age group 15-25 are seen in the calisthenics park.

Daytime 2:00 pm

On observation, it was seen that the park is almost empty during daytime in the summer season. This might be due to the lack of shaded spaces, which could protect from the sun.

Saturday

While counting the people in the park at 4 to 6 o'clock, in total of approx. 555 people were there in the park among which 221 were female and 334 were male. Which shows that

39.81% of total users were female. The various age group of people can be seen in the park and various group of peoples uses various part of the park. Most of the people can be seen in the central green lawn spending time with their friends and family.

5.3 Findings of the Questionnaire Survey

In this chapter the results of the prepared surveys are analyzed and set in relative tables and charts to help to explore the important differences and resemblances between two parks. The findings of the survey are categorized to the three groups, profiles of users of the two parks, the use of parks and the sense of safety felt by parks users.

In the Shankha Park, Total of 102 samples of data were taken among which 60 samples were collected by sitting in the park and remaining 42 were collected by going to the nearby community of the park. Data collection was done by face-to-face interaction with the park users and the various group of people of Nearby Community. Among the total 102 respondents, 53 were Female and 49 were Male.

In the case of Narayanchaur, total of 60 samples of data were taken among which 40 samples were collected by sitting in the park and interacting with the park users themselves and remaining 20 samples were collected by going to the nearby community of the Park.

5.3.1 User Profile

5.3.1.1 Age Group

In this part of the survey, users are divided in 5 age groups. The main reason of this division is to explore the most active group in public urban life of park. Various age group of people were selected to participate in the survey so as to get the view of people of all age group. So this data is useful to understand how need and purpose to use the park differentiate by age group.

Table 1: The Percentage of Age Group Division in Shankha Park and Narayanchaur

| Park | Shankha park | | Narayanchaur | |
|-------------|--------------|---------|--------------|---------|
| Age Group | Male | Female | Male | Female |
| >60 | 8.82 % | 5.88 % | 6.67 % | 11.67 % |
| 15-25 years | 16.67 % | 9.80 % | 16.67 % | 16.67 % |
| 25-40 years | 11.76 % | 23.53 % | 15.00 % | 13.33 % |
| 40-60 years | 10.78 % | 12.75 % | 11.67 % | 8.33 % |

Shankha Park

Out of all 102 respondents of Shankha Park , 27 respondents of age group 15-25, 24 of age group 40-60 and 15 of age group 60+, 36 of age group 25-40.

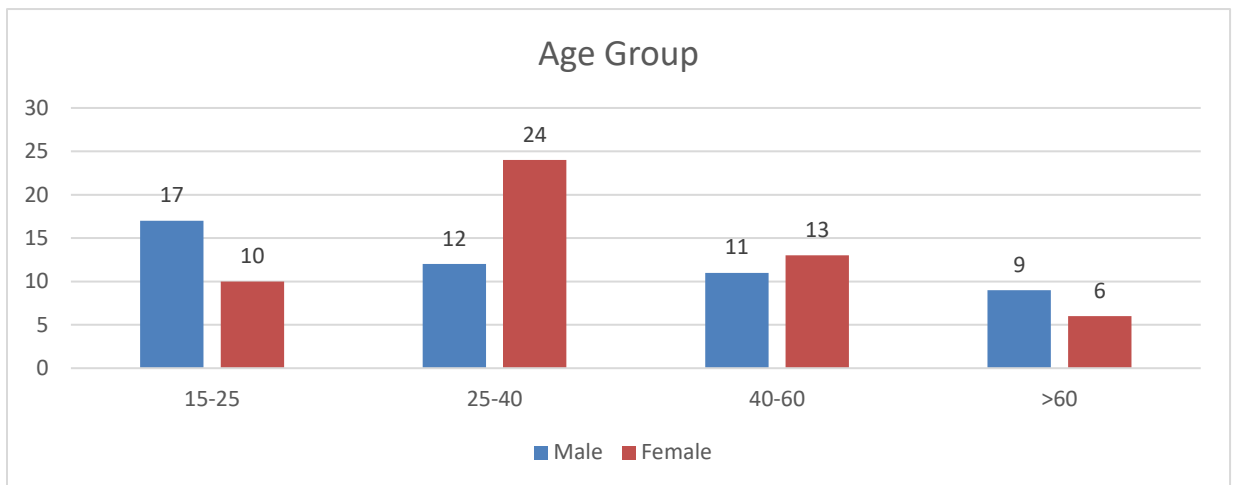


Chart 1: Respondent's Age Group (Shankha Park)

Narayanchaur

Out of all 60 respondents of Narayanchaur, 20 respondents were of age group 15-25, 17 of age group 25-40, 12 of age group 40-60 and 11 of age group 60+.

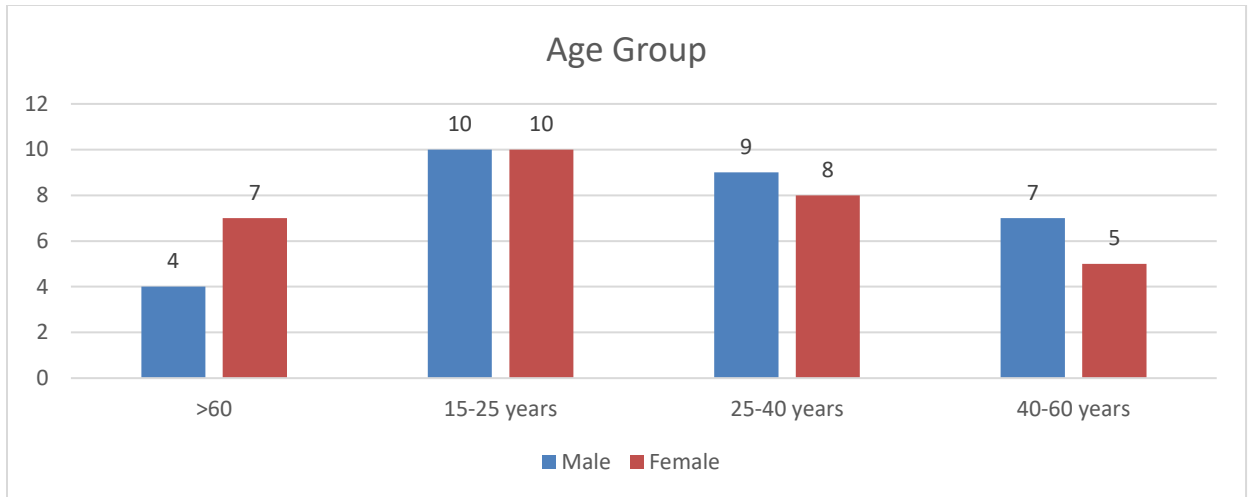


Chart 2: Respondent's Age Group (Narayanchaur)

5.3.1.2 Educational level

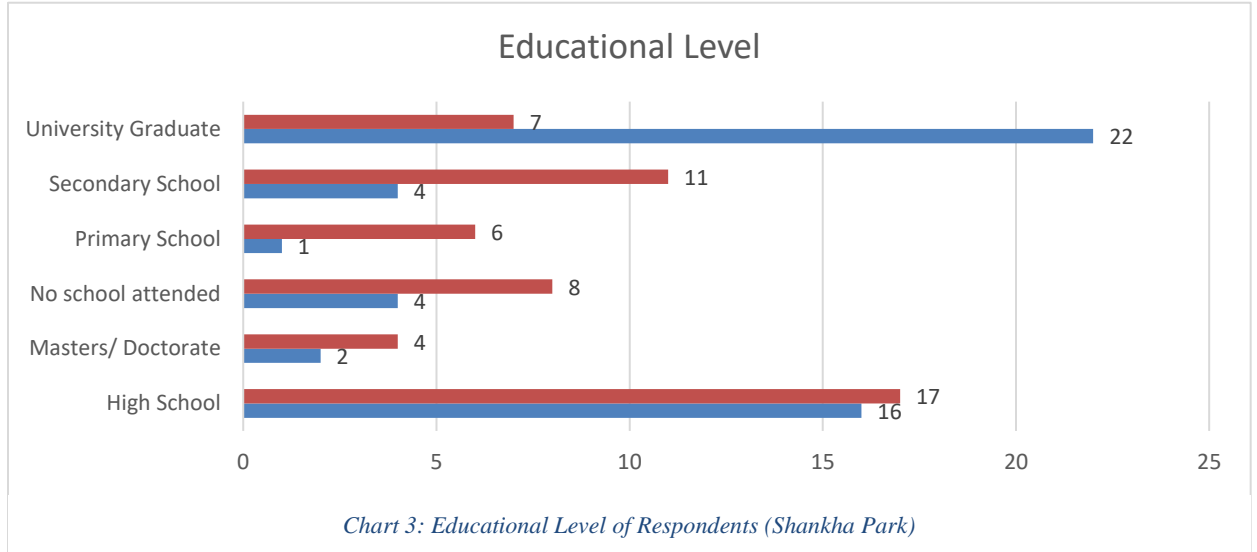
Educational level was divided into 6 categories. The limit on the education level was not restricted in this survey so as to include people of all groups.

Table 2: The Percentage of Different educational Level of Shankha Park and Narayanchaur

| Park | Shankha park | | Narayanchaur | |
|---------------------|--------------|---------|--------------|---------|
| | Male | Female | Male | Female |
| High School | 15.69 % | 16.67 % | 11.67 % | 20.00 % |
| Masters/ Doctorate | 1.96 % | 3.92 % | 3.92 % | 3.33 % |
| Primary School | 0.98 % | 5.88 % | 3.33 % | 3.33 % |
| Secondary School | 3.92 % | 10.78 % | 18.33 % | 8.33 % |
| University Graduate | 21.57 % | 6.86 % | 10.00 % | 15.00 % |
| No School Attended | 3.92 % | 7.84 % | 0.00 % | 0.00 % |

Shankha Park

Among 102 respondents, 29 respondents had completed their Bachelors level among which 22 were male and 7 were Female, followed by 33 with High School level. In addition, there were 12 people who never attended the school and 7 people attended school



up to primary level.

Narayanchaur

Among 60 respondents, 19 respondents had completed their high school level among which 12 were male and 7 were Female, followed by 16 with Secondary School level. In addition, there were 15 people who have completed their Bachelors Degree and 6 people completed Masters/ Doctorate Level

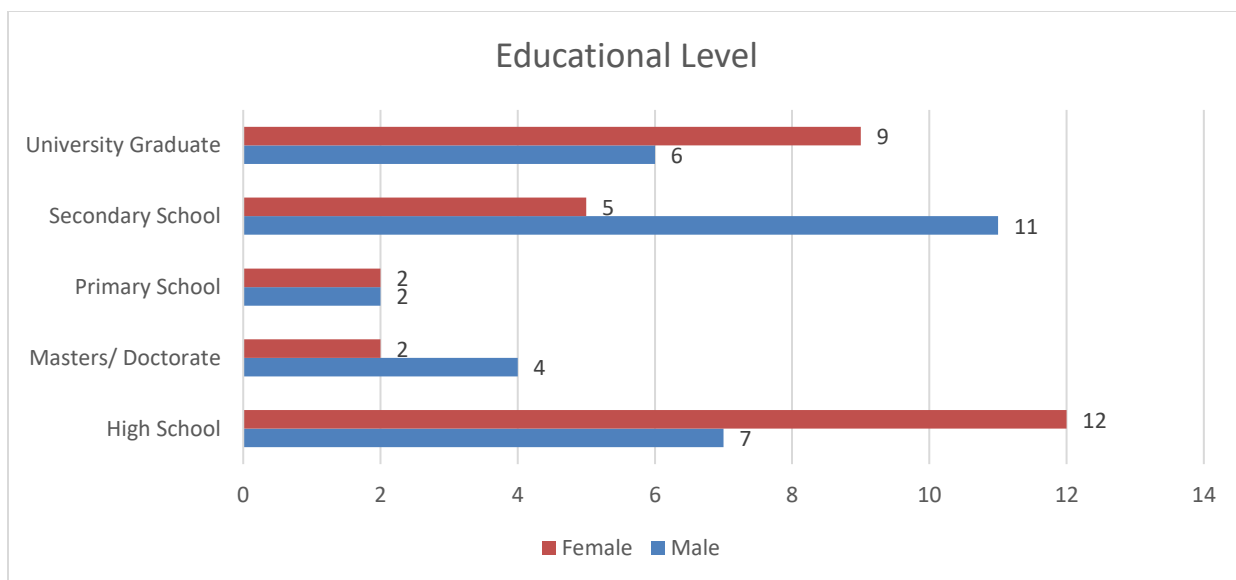


Chart 4: Educational level of Respondents (Narayanchaur)

5.3.1.3 Employment Status

The employment status of the people are categorized into 5 categories as Student, Working, Unemployed, Retired and Housewife.

Table 3: The percentage of Employment status of respondents of Shankha Park and Narayanchaur

| Park | Shankha park | | Narayanchaur | |
|------------|--------------|---------|--------------|---------|
| | Male | Female | Male | Female |
| Retired | 5.88 % | 1.96 % | 6.67 % | 5.00 % |
| Student | 11.76 % | 12.75 % | 20.00 % | 15.00 % |
| Unemployed | 10.78 % | 2.94 % | 1.67 % | 5.00 % |
| Working | 19.61 % | 14.71 % | 21.67 % | 20.00 % |
| Housewife | 0.00 % | 19.61 % | 0.00 % | 5.00 % |

Shankha Park

In the result of the survey, out of 53 female respondents, 20 were housewife. Among the 102 respondents, 35 were engaged in the work whereas 25 of them were a Student, 14 of them were unemployed and 8 were retired.

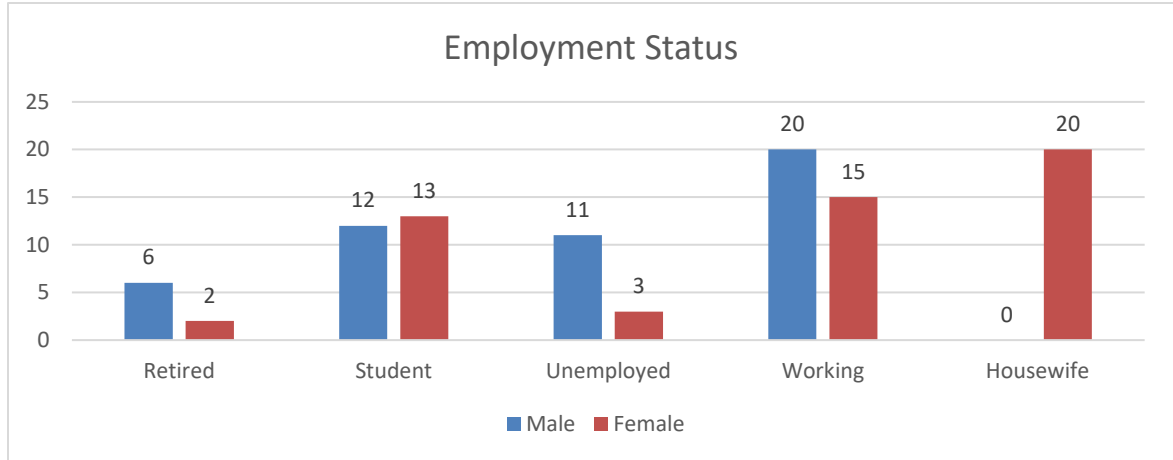


Chart 5: Employment Status of Respondents (Shankha Park)

Narayanchaur

In the result of the survey, out of 30 female respondents, only 3 of them were housewife. Among the 60 respondents, 25 were engaged in the work whereas 21 of them were a Student, 4 of them were unemployed and 7 were retired.



Chart 6: Employment Status of Respondents (Narayanchaur)

5.3.1.4 Marital Status of the Respondents

This part of survey's results illustrates that married users constitute the majority with 64 respondents among which 54 respondents have children.

Shankha Park

Among the 102 respondents, 36 people are unmarried among which 16 were female whereas 20 were male. Also out of total 66 married people, 54 of them have children where as 10 of them do not have children.

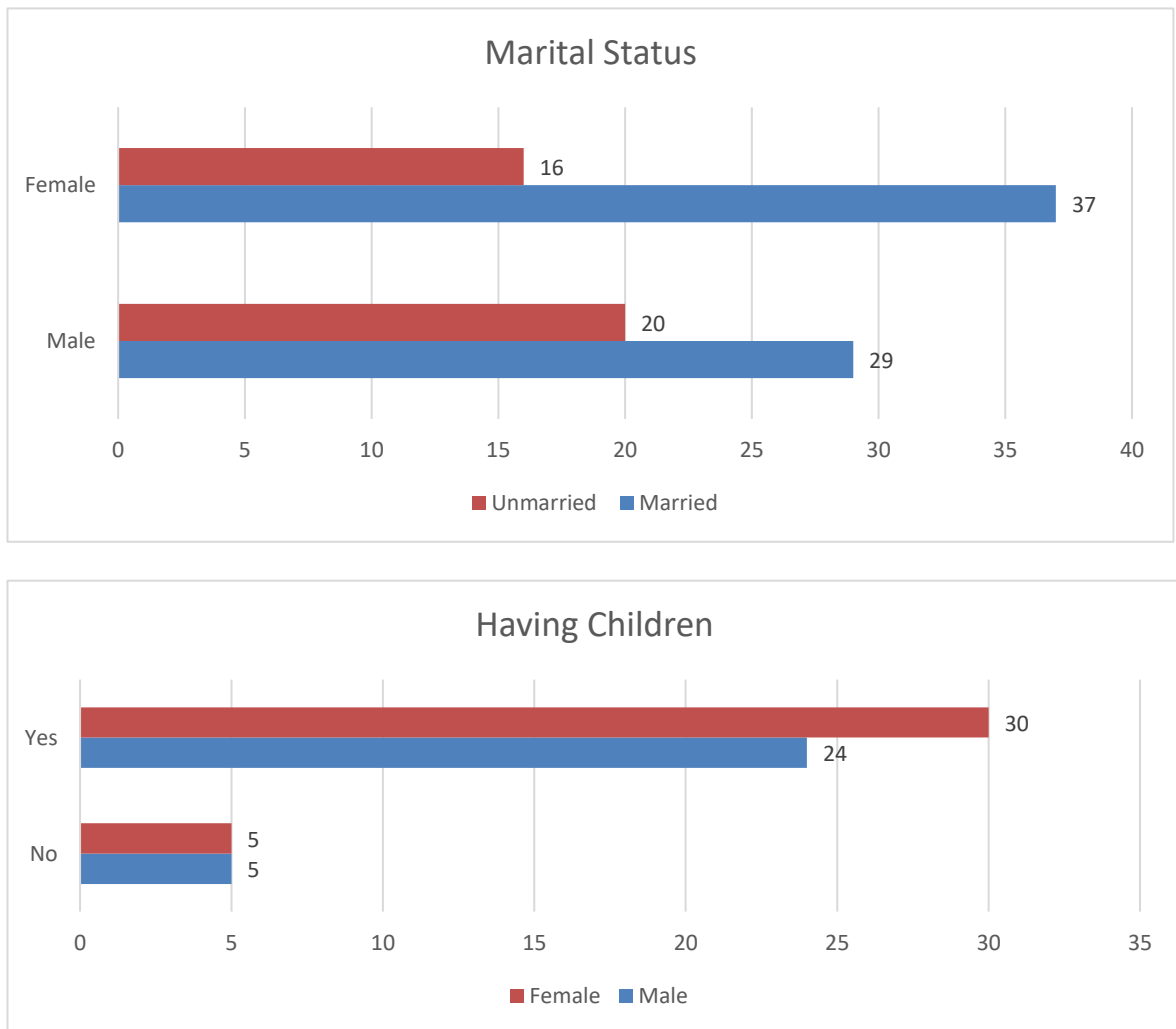


Chart 7: Marital Status of Respondents (Shankha Park)

Narayanchaur

Among the 60 respondents, 24 people are unmarried among which 12 were female and 12 were male. Also out of total 36 married people, 33 of them have children whereas 3 of them do not have children.

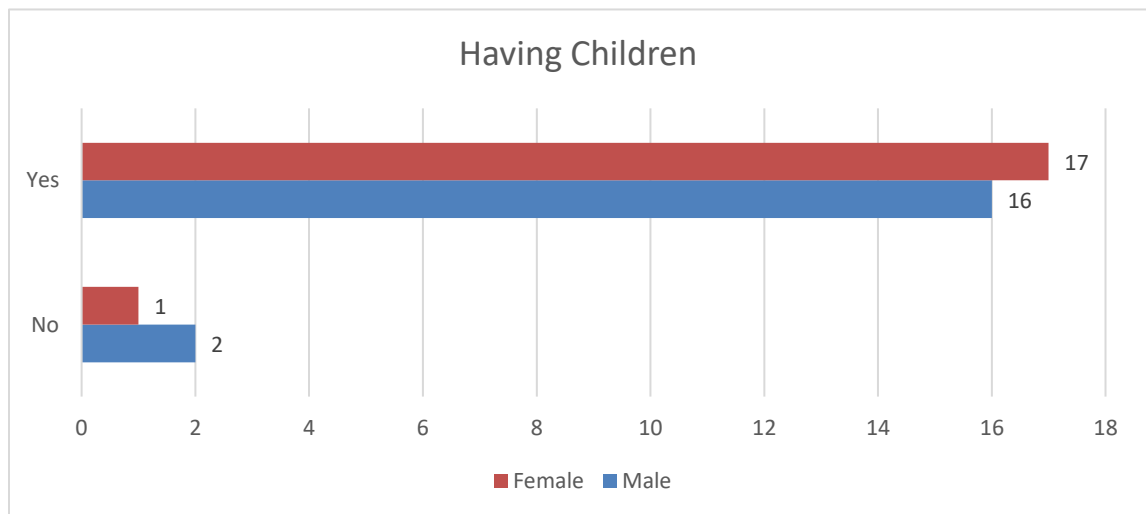
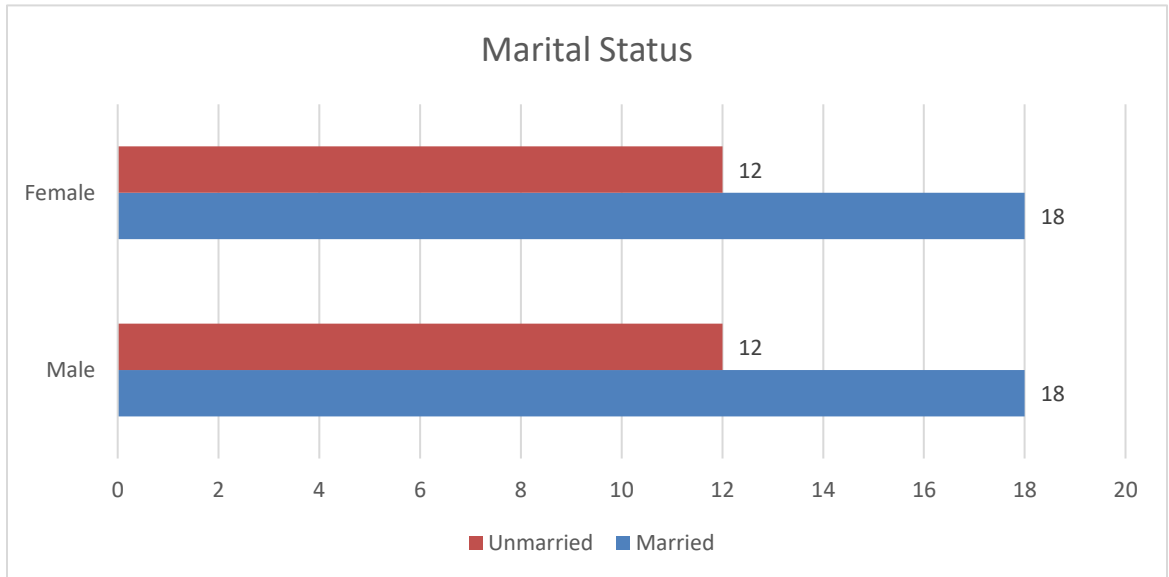


Chart 8: Marital Status of Respondents (Narayanchaur)

All those charts illustrates an important profile of the respondents.

5.3.2 The Use of the Park

This section of the survey includes several important questions on usage patterns, favorite times, modes of transportation to parks, primary reasons for visiting parks, and the park areas that visitors frequent the most. It aims to illustrate how case studies are used, which undoubtedly aids in the design of open public areas like parks.

Information regarding the requirements and behaviors of people who utilize public spaces is crucial. By paying attention to these patterns, a well-designed public space might accommodate all of the needs and usage patterns of its users.

In the case of Shankha Park, Among the 102 response, 60 response was collected from the park itself and remaining 42 from the nearby community. Out of this 42 respondents, 22 of them visit the park where as 20 of do not visit the nearby park due to various reasons. Among these 20 people,6 peoples have responded that they don't like to visit the park because of some Awkward and embarrassing moments. Teenager's girls did these responses. According to them, these type of awkward activities occurs after 2:00 pm in the daytime. In addition, out of these 20 people, 7 responded that they could not visit to nearby park due to their busy schedule and 7 responded that they feel lazy to walk alone to the park. The remaining 82 respondents use the Shankha park whose detail are as shown in the charts below.

In the case of Narayanchaur, Among 60 response, 40 response was collected from the park itself and remaining 20 from the nearby community. Out of 20 respondents from the community, 17 of them visit the park whereas 3 of them do not visit the park because of their busy schedule. So, out of 60 respondents from narayanchaur, 57 of them visit the park whose details are as shown in the charts below.

5.3.2.1 The Frequency of Using Parks

Table 4: The percentage of frequency of use by male and female users of Shankha Park and Narayanchaur

| Park | Shankha park | | Narayanchaur | |
|------------------|--------------|---------|--------------|---------|
| | Male | Female | Male | Female |
| 1-2 times a week | 8.54 % | 14.63 % | 3.51 % | 10.53 % |
| 2-3 times a week | 13.41 % | 6.10 % | 15.79 % | 28.07 % |
| 4-6 times a week | 6.10 % | 7.32 % | 15.79 % | 1.75 % |
| Everyday | 18.29 % | 13.41 % | 12.28 % | 3.51 % |
| Rarely | 4.88 % | 7.32 % | 5.26 % | 3.51 % |

Shankha Park

Out of 82 respondents, 26 (31.7%) people visit the park in the regular basis. These are mostly the people living in nearby community of the park and who go to park for physical exercise, walking and elderly people who go to spend the time with friends. 19 (23.17%) people visit the park 1-2 times a week and these are mostly the working people and they visit the park in the weekend day ie. Saturday. Also, among the respondents, 10 (12.19%) people visit the park rarely and these are the people living far away from park and visiting park with friends and family for refreshment and dry picnic purpose.

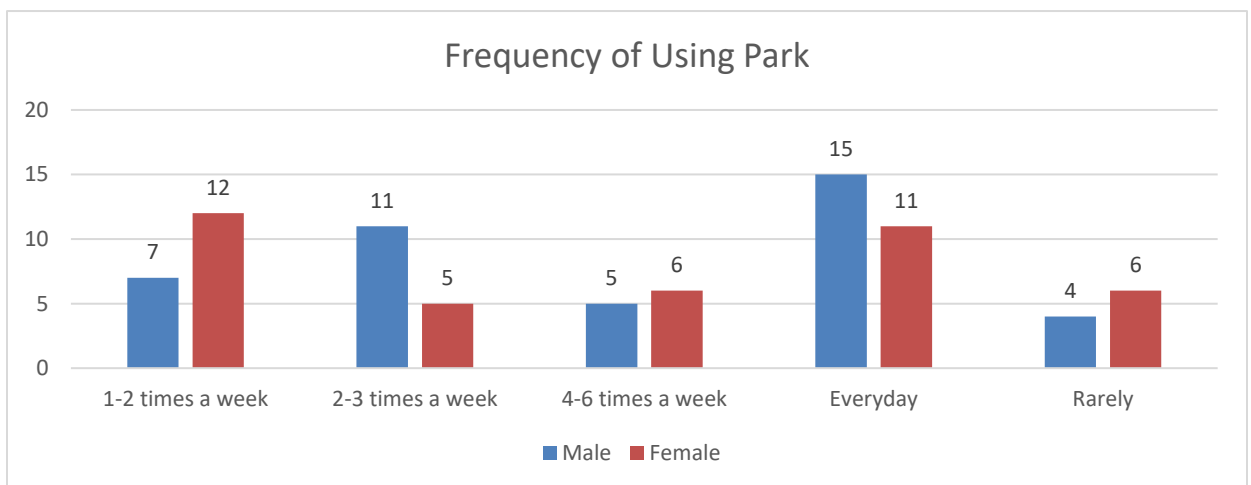


Chart 9: Frequency of Using Park (Shankha Park)

Narayanchaur

Out of 57 respondents, only 9 (15.79%) people visit the park in the regular basis. These are mostly the people living in nearby community of the park and who go to park for physical exercise, walking. 25 (43.85%) people visit the park 2-3 times a week whereas 5 (8.77%) people rarely visit the park.

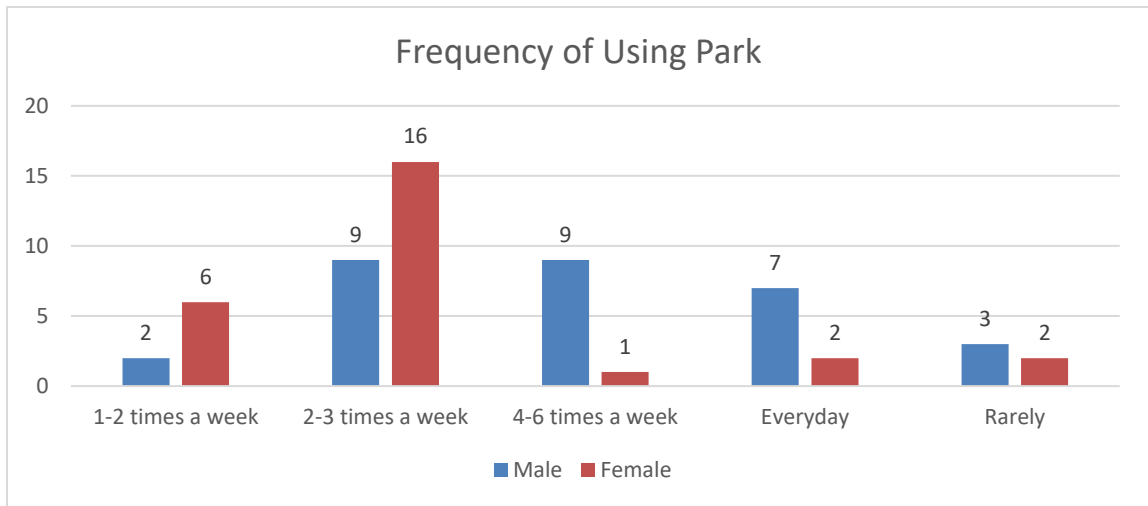


Chart 10: Frequency of Using Park (Narayanachaur)

5.3.2.2 Time Preferred for Using the Park

The time in a day in this survey is categorized as: Morning (5:00 am to 12:00 am), Noon (12:00 pm to 5:00 pm) and Evening (5:00 pm to 9:00 pm).

Table 5 : The percentage of preferred time for using Shankha Park and Narayanchaur

| Park | Shankha park | | Narayanchaur | |
|----------------|--------------|---------|--------------|---------|
| | Male | Female | Male | Female |
| Time Preferred | | | | |
| Day | 7.32 % | 10.98 % | 8.77 % | 0.00 % |
| Evening | 23.17 % | 23.17 % | 22.81 % | 38.60 % |
| Morning | 20.73 % | 14.63 % | 21.05 % | 8.77 % |

Shankha Park

Among the surveyed users of the park, 46.31% of them preferred to use park in evening and 35.36% prefer to use in the morning whereas 18.29% prefer to use park in Noon. As per my observation, the retired people of age group 60+ preferred to use the park in noon.

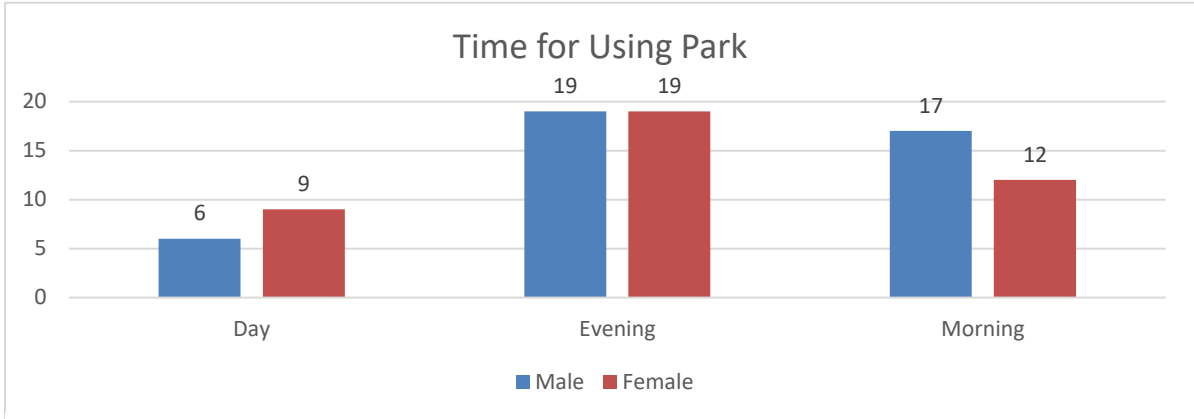


Chart 11 : Time preferred for using Shankha Park

Narayanchaur

Among the surveyed users of the park, 61.4% of them preferred to use park in evening and 29.82% prefer to use in the morning whereas only 8.77% prefer to use park in Day time. As per my observation, this 8.77% of people also prefer using park after 4 o'clock only.

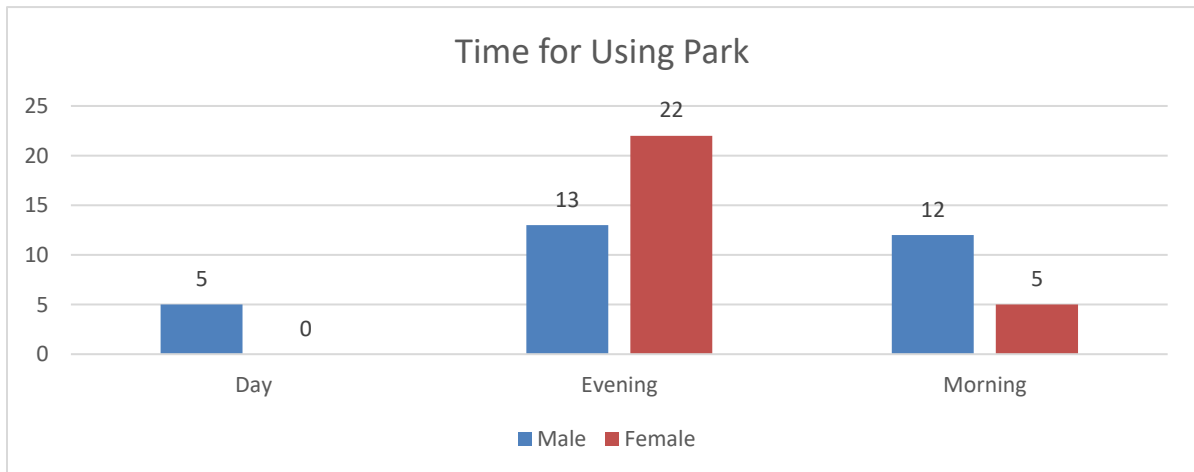


Chart 12: Time Preferred for using Narayanchaur

5.3.2.3 Time spent in the Park

In this survey, the time spent in the park is categorized as Less than 1 hour, 1 to 2 hour and More than 2 hour.

Table 6: The percentage of time spent in the Shankha Park and Narayanchaur

| Park | Shankha park | | Narayanchaur | |
|------------------|--------------|---------|--------------|---------|
| | Male | Female | Male | Female |
| 1-2 hour | 25.61 % | 31.71 % | 26.32 % | 29.82 % |
| Less than 1 hour | 13.41 % | 13.41 % | 22.81 % | 17.54 % |
| More than 2 hour | 12.20 % | 3.66 % | 1.75 % | 0.00 % |

Shankha Park

Among the surveyed users of the park, 57.32% of them spend 1 to 2 hour in the park which are mostly the working people and prefer to use park in the morning and the evening. 22 (26.83%) people responded that they spend less than 1 hour in the park and mostly they are the one who come to park to just walk around alone. Also 13(15.85%) people responded that they spend more than 2 hour in the park and in my observation, they are retired people

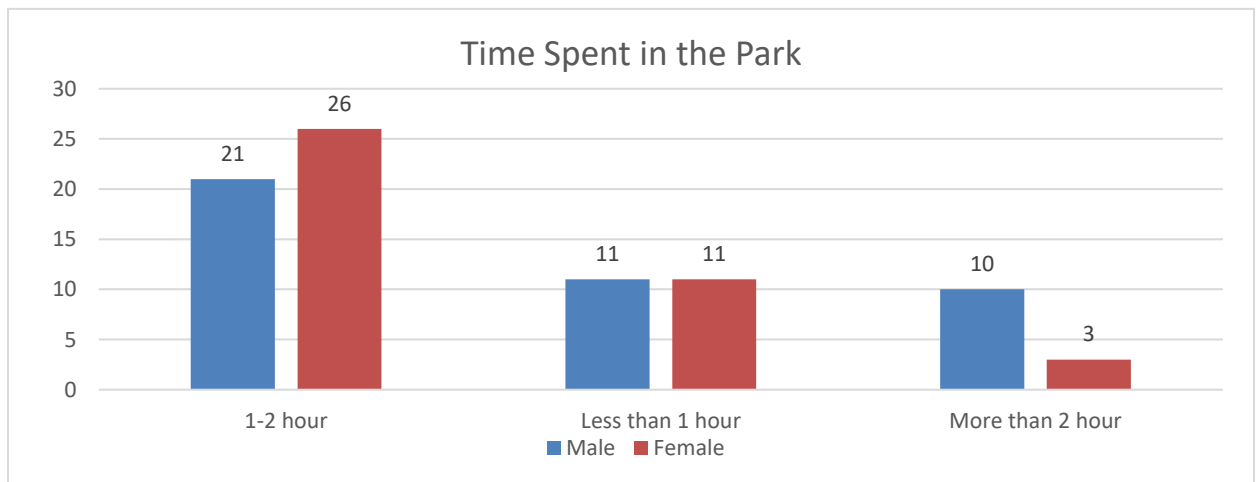


Chart 13: Time Spent in Shankha Park

of age group 60+ and unemployed people as well. They usually use the park in the noon time for gathering with friends.

Narayanchaur

Among the 57 surveyed users of the park, 56.14% of them spend 1 to 2 hour in the park, which are mostly the working people and prefer to use park in the morning and the evening. 40.35% of surveyed users spend time less than 1 hour in the park whereas the percentage of people who spend more than 2 hour in the park is negligible which might be due to lack of activities in the park.

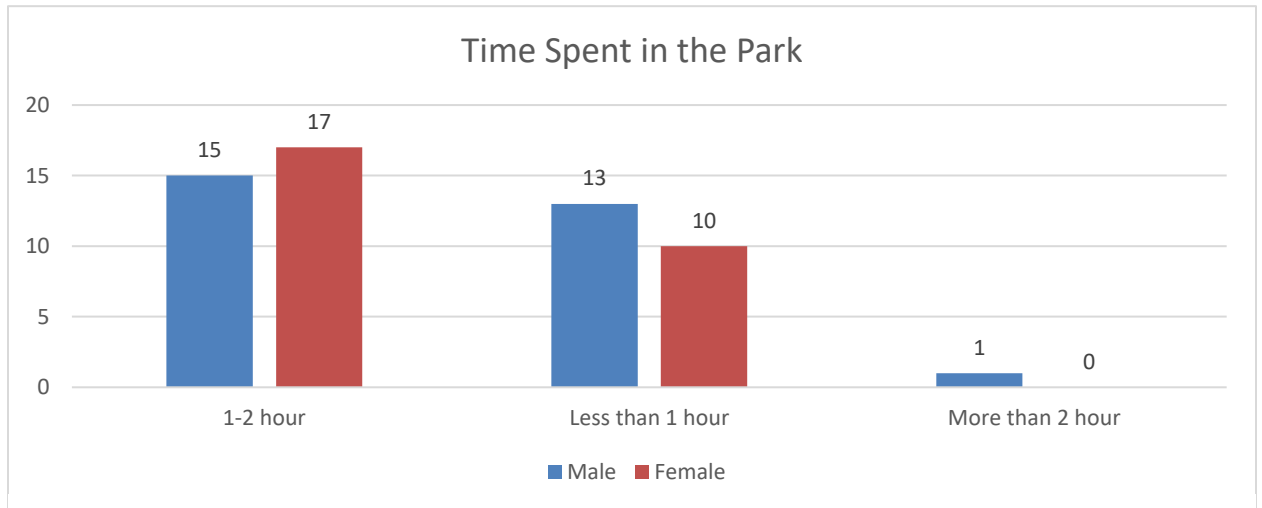


Chart 14: Time Spent in Narayanchaur

5.3.2.4 Distance from Living place to Park

In this survey, the distance from the living place to park shows the catchment area of the park and it is categorized as: Less than 10 min or less than 1 km, 10-30min or 1 to 2 km, 30-60 min or 2 to 4 km and more than 60 min or more than 4 km. Here, the time in minute is the time taken for walking from living place to the park.

Shankha Park

Among the 82 respondents, 38 (43.3%) people live within 10 min walking distance from the park, 29 (35.36%) people live at 10-30 min walking distance and only 5 (6.09%) people come from more than 60 min walking distance.

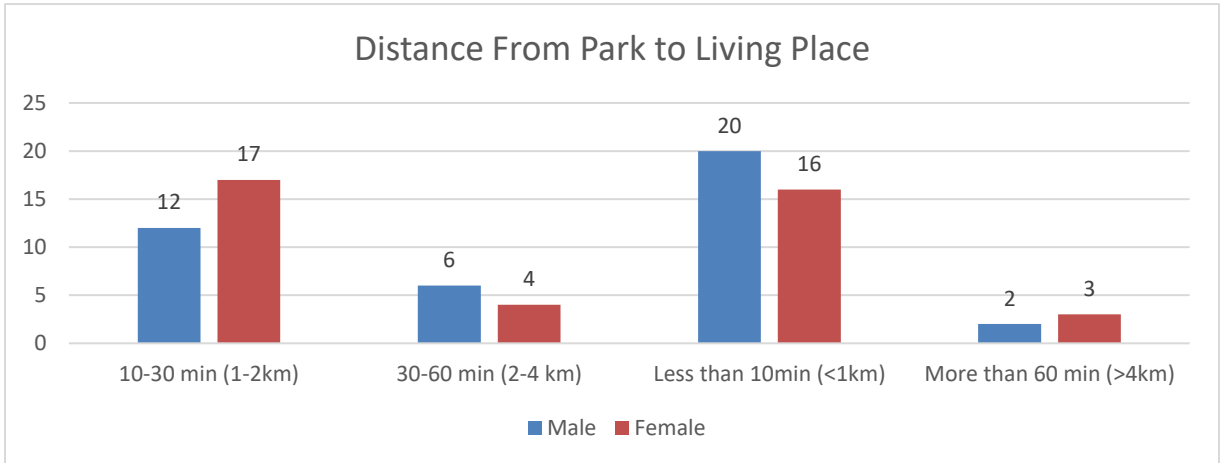


Chart 15: Distance from Shankha Park to Living Place

Narayanchaur

Among the 57 respondents, 44 (77.19%) people live within 10 min walking distance from the park, 9 (15.79%) people live at 10-30 min walking distance and only 2 (3.5%) people

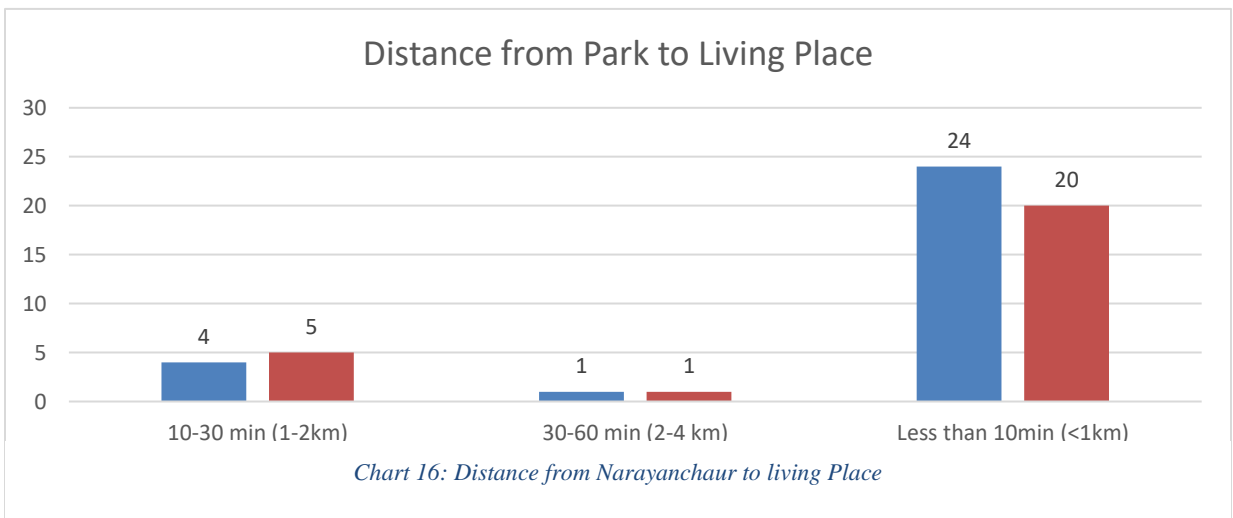


Chart 16: Distance from Narayanchaur to living Place

come from walking distance of 30-60 min. The peoples travelling more than 4km cannot be seen in this park.

5.3.2.5 Means of Transportation to Park

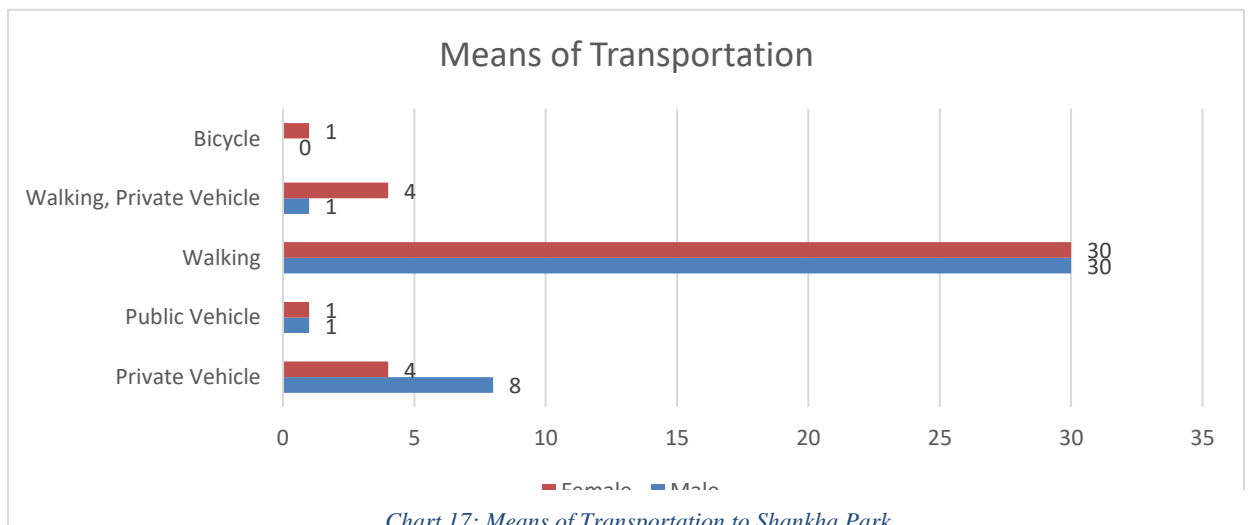
In this survey, the means of transportation used by the respondents while visiting to the park is analyzed.

Table 7: The percentage of different means of transportation of users in Shankha Park and Narayanchaur

| Park | Shankha park | | Narayanchaur | |
|-----------------|--------------|---------|--------------|---------|
| | Male | Female | Male | Female |
| Bicycle | 0.00 % | 1.22 % | 7.02 % | 3.51 % |
| Private Vehicle | 10.98 % | 9.76 % | 3.51 % | 3.51 % |
| Walking | 39.02 % | 36.59 % | 42.11 % | 40.35 % |
| Public Vehicle | 1.22 % | 1.22 % | 0.00 % | 0.00 % |

Shankha Park

The survey's results shows that about 76.83 percent of people prefer to walk to the park whereas 18.29 percent of people use private vehicle to go to the park. This shows that most of the respondents live within the walking distance of the park.



Narayanchaur

The survey's results shows that about 80.7 percent of people prefer to walk to the park whereas 10.5 percent of people use bicycle to go to the park. This shows that most of the park user live within the walking distance of the park.

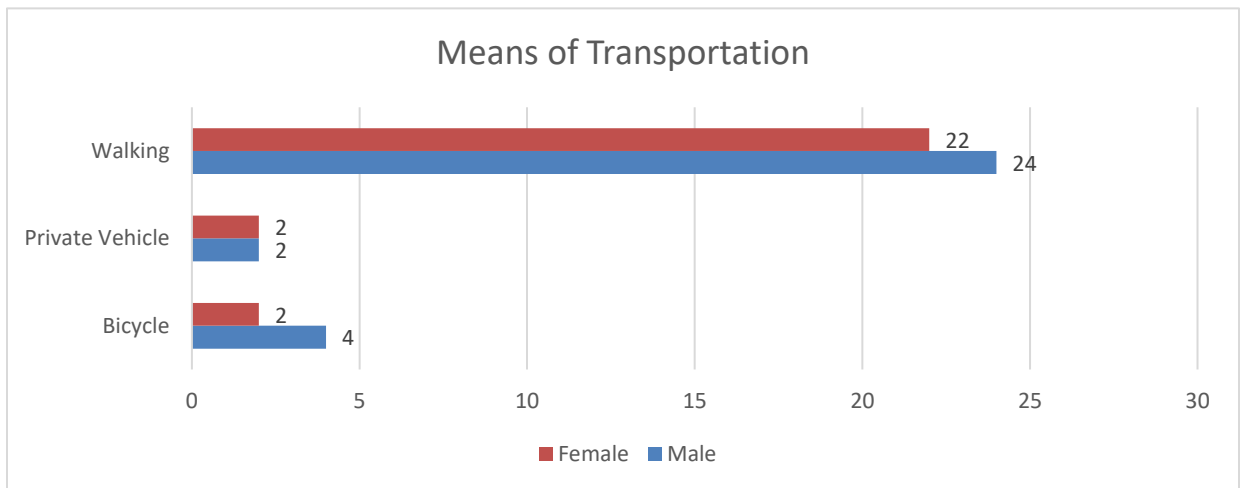


Chart 18: Means of Transportation to Narayanchaur

5.3.2.6 Main Purpose of using the Park

Parks are multipurpose public spaces. There are different activity areas in each park. In this part of the survey, four main reasons for coming to the park are formulated in the questions and almost all the answers of the interviewed people could be categorized under these answers. In this survey, multiple choice was allowed.

Shankha Park

Among the respondents, most of them visit the park for walking, physical exercise followed by availability of Green space, Friends meeting, and Children's play area.

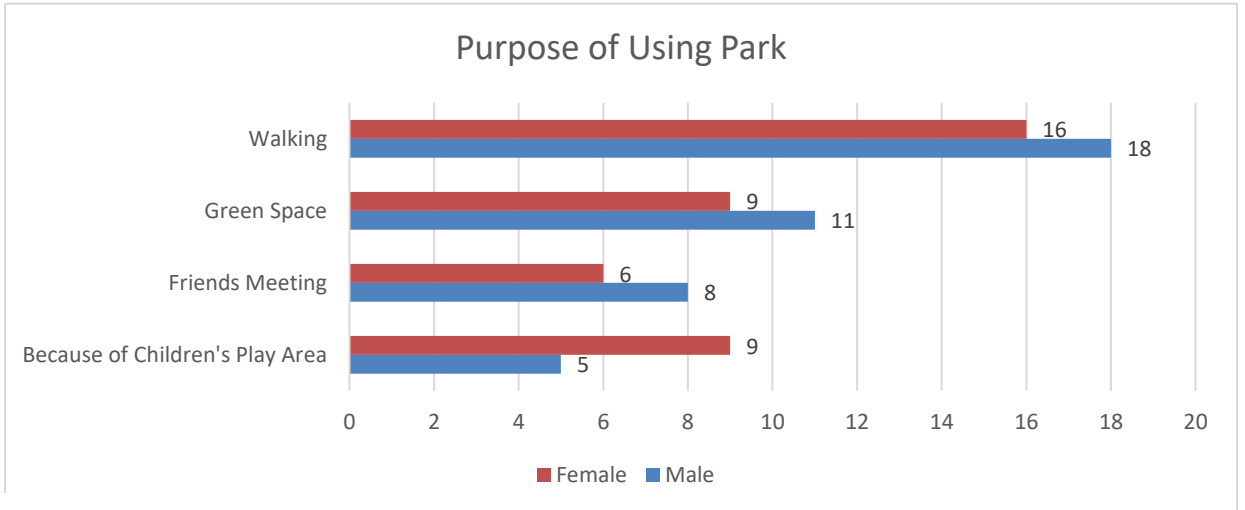


Chart 19: Purpose of Visiting Shankha Park

Narayanchaur

Among the respondents, most of them visit the park for walking purpose followed by availability of green space, children's play area and Friends Meeting

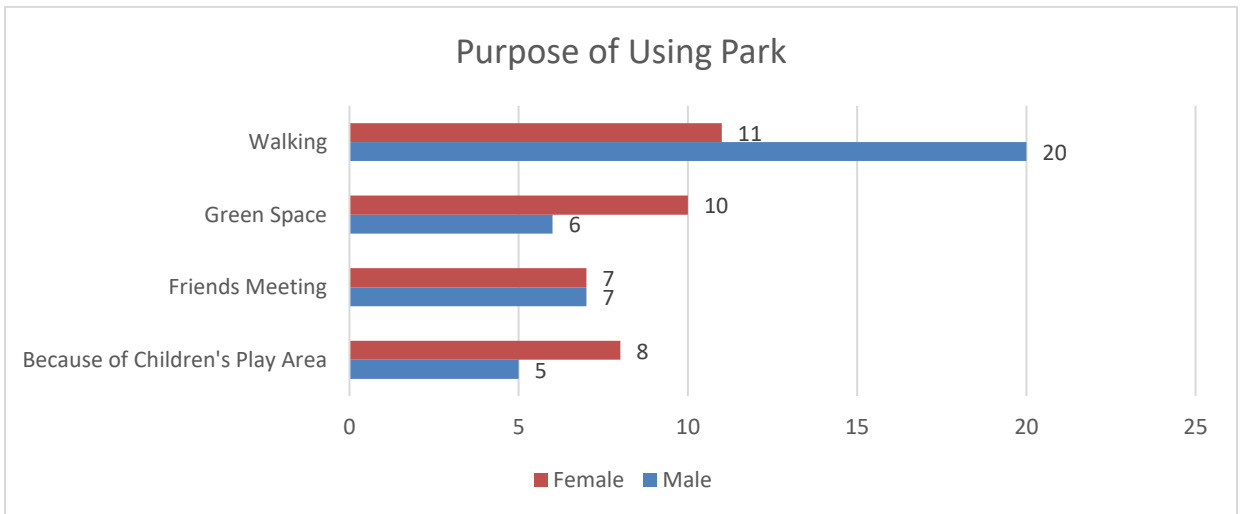


Chart 20: Purpose of Visiting Narayanchaur

5.3.2.7 Most used areas of Park by the Users

Another Influential factor in the use patterns of the parks is the most preferred areas in the park by users.

Shankha Park

The various elements of the Shankha park is categorized as Outdoor seating area, Covered seating, Green Lawn, Children's Play Area, Tree Garden/ Chautara, Walkways/ outdoor gym area and Pati/Temple area.

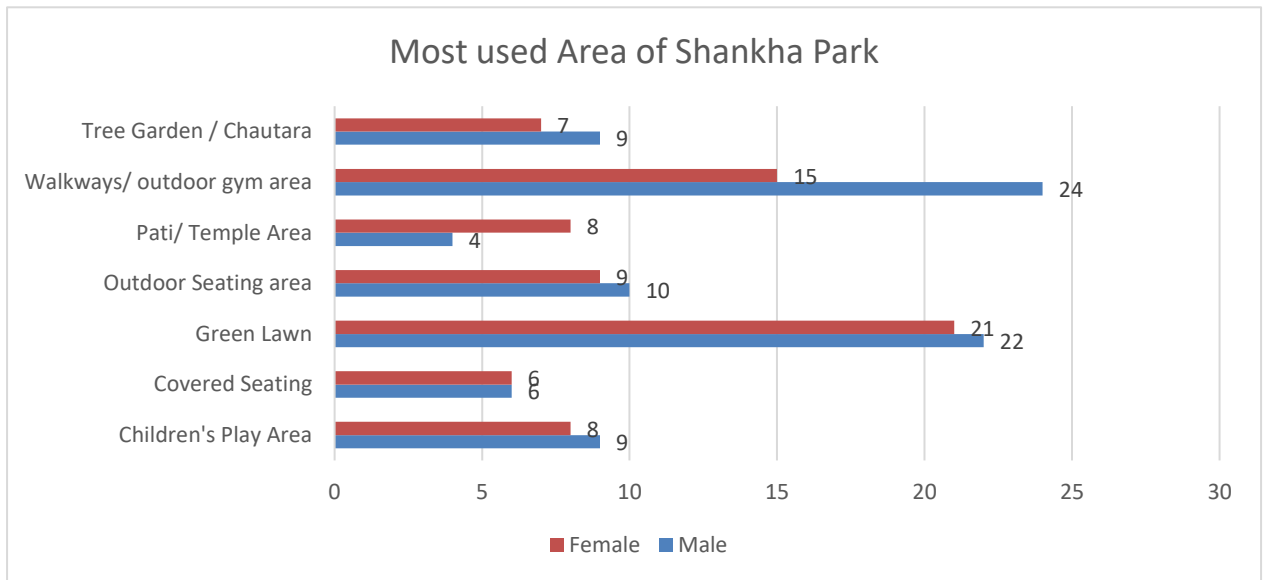


Chart 21: Most Used area of Shankha Park

The survey shows that 27.21 percent of the respondents prefer to use Green Lawn, 24.68 percent prefer to use walkways and outdoor gym area, 12.02 percent prefer outdoor seating area followed by tree garden/ Chautara, and children's play area preferred by 10.13 percent. Similarly, 7.6 percent of respondents prefer to use Pati/ Temple area.

Narayanchaur

The various elements of the Narayanchaur is categorized as Outdoor seating space, Green Lawn, Walkways and calisthenics park / Children's Play area. The survey shows that most of the respondents prefer to use green lawn followed by walkways, outdoor seating space and calisthenic park.

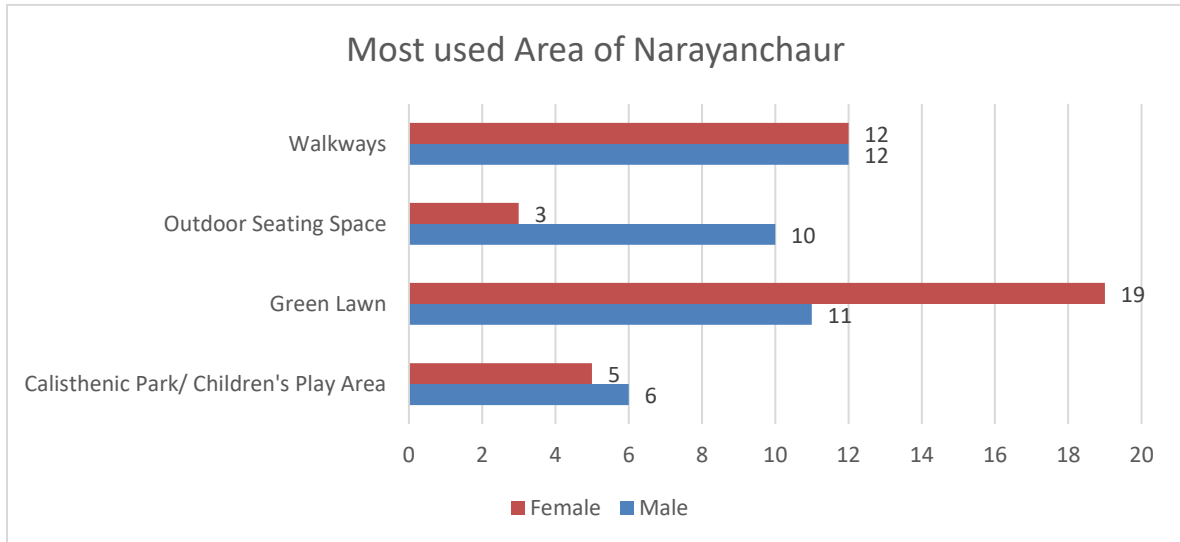


Chart 22: Most Used area of Narayanchaur

5.3.3 Safety and Security Condition of Parks and Related Aspects

The most significant and impressive variables when examining how gender affects public areas and vice versa are security and safety concerns. Women in particular do not favor locations where they lack a sense of security. Both men and women should feel secure when visiting public parks. Therefore, in this section of the survey, details about the users' perceptions of safety, their preference for arriving alone or with a companion, and lastly the factors that influence leaving the parks are taken into account.

5.3.3.1 The Sense of Safety Felt by the Park Users

The architecture of a space has an impact on its security. Furthermore, More people will visit an area if they feel safe, and more people visiting the parks will increase their sense of security.

Almost every respondents claimed that they feel safe in the park.

5.3.3.2 Preference of Being Accompanied

Another aspect that affects user behavior and park conditions is whether visitors choose to utilize the parks alone or with a companion.

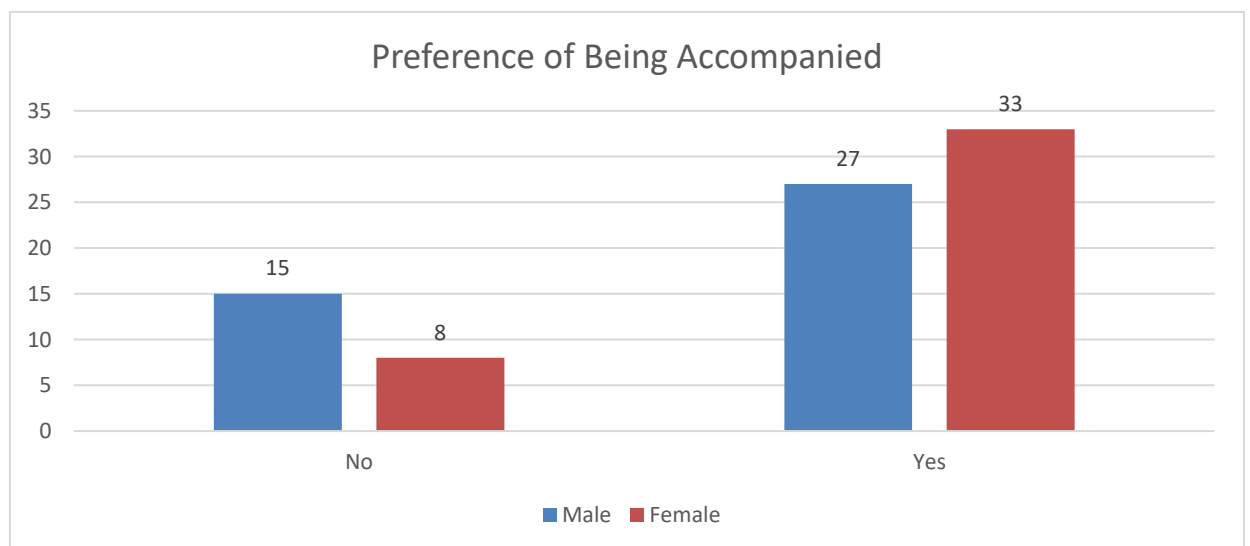


Chart 23: Preference of being accompanied in Shankha Park

Survey shows that 26.8% of respondents prefer to use the park alone while 73.17% of respondents prefer being accompanied with someone close to them. Among them 40% of respondents prefer being accompanied with Friends, 33.3% with family, 21.7% with spouse and 5% with Girl or Boy friend.

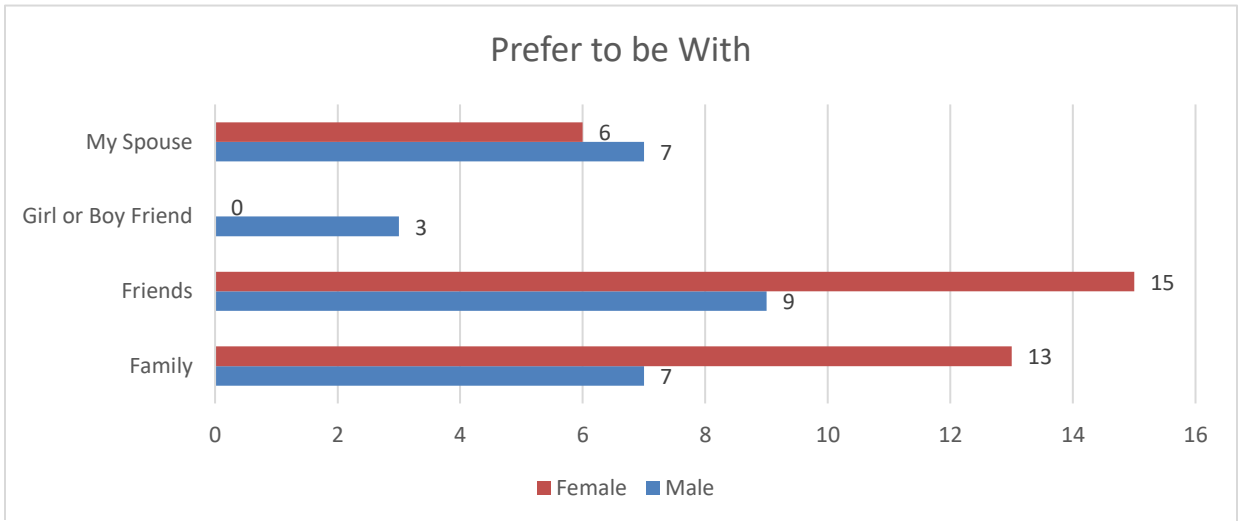


Chart 24: Prefer to be with

Narayanchaur

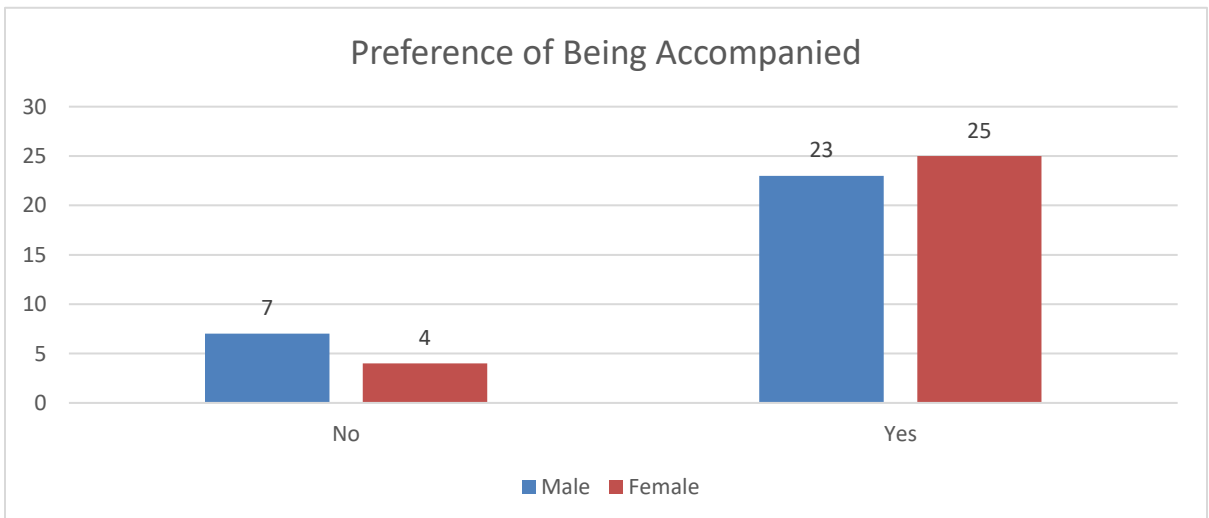


Chart 25: Preference of Being Accompanied in Narayanchaur

Survey shows that 19.3% of respondents prefers to use the park alone while remaining 84.2% of respondents prefer being accompanied with someone close to them. Among them 36.8% of respondents prefer being accompanied with Friends, 36.8% with family, 8.7% with spouse and 3.5% with Girl or Boy friend.

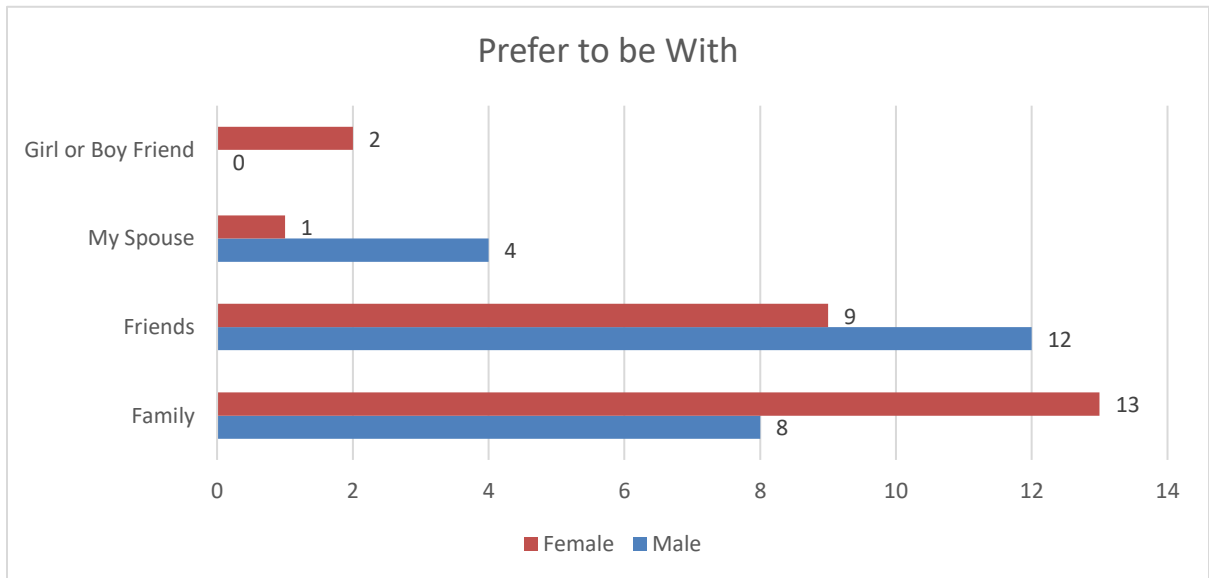


Chart 26: Prefer to be with

CHAPTER SIX: DISCUSSION

6.1 Examining the Planning Process

6.1.1 Who were involved in the Planning or design of the Park? And Why was it designed?

Shankha Park was designed by Ar. Bharat Sharma. This project was initiated by the Nepal government to commemorate the Panchayat's silver jubilee at around BS 2042 on vacant public space. Architect Bharat Sharma was the only person involved in the design of the Shankha Park. So the design of the park was expert-led without any participation of community people or any other co-designer. So, the planning team was not inclusive at all. The main aim of designing this park was to create an urban space/public space where everyone could visit rather than create it for a specific recreational purpose by understanding the needs of the people of different age groups and genders. So it was designed in a gender-neutral way.

Whereas the design of Narayanchaur was done by Prabal Thapa Architects in 2012 BS. Ar. Prabal Thapa, along with Ar. Liza Pradhan was involved in the process. This project was initiated by the community service center of Naxal and later constructed by the Kathmandu Valley Development Authority. To handle this project throughout the planning and implementation phase, a sub-committee was formed under the community service center. This sub committee was composed of five members from the community itself, among which all the members were male, mostly from an elite group. So the community representation was through a committee formed, which was not inclusive at all. The main aim of designing Narayanchaur was to convert it from a garbage disposal site to a dynamic public space and preserve the local history.

6.1.2 To whom the park was designed for?

The Shankha Park was designed to facilitate all the people of Kathmandu with free access. According to Ar. Bharat Sharma, the park was designed to facilitate people of all ages. In today's context, most of the users of the park are males from the nearby community.

Narayanchaur was designed for the community people of Naxal, who were mostly an elite group.

6.1.3 How was the park designed or planned?

Shankha Park was designed following the requirements of the Nepal government where all the decisions and activities were fixed by the designer himself. According to the designer of the park, participation of community people and any other women was not done because, at the time it was designed, the practice of participatory planning and gender inclusion was not an issue. Also, the government did not have any priority for gender issues. Local people never wanted to come out of their homes and participate in any kind of public activity. So the planning process was not inclusive at all.

In the case of Narayanchaur, the requirements for the design of the park were given by the community service center of Naxal, which covers the scope of providing a dynamic public space that pays homage to local history, promotes citizen engagement, provides environmental benefit to the community, and develops the open field as a digester risk management park. So, the park was designed following these requirements. Therefore, the design of Narayanchaur is a community-led design, technically supported by the experts. Although the design was community-driven, the involvement of girls and women in the planning process itself was negligible. Therefore, the process of planning the park was not inclusive.

6.2 Examining the Inclusivity of Space

6.2.1 Examining the usability of Space via Survey

To examine the usability of space, several important questions on usage patterns, favorite times, and modes of transportation to parks, primary reasons for visiting parks, and the park areas that visitors frequently use, who they like to visit with were asked to respond.

The findings of the survey reveal the usage pattern of both males and females visiting the park. Most people visit Shankha Park in the morning and during the day. The population

of the age group 25–40 is seen in the morning, whereas the population of the age group 60+ is seen in the daytime. These are mostly the male population. Mixed groups of people are seen using the park in the evening time. Those mostly include youth of the age group of 15–25 and parents with their children of the age group above 5. In the case of Narayanchaur, the population visiting Narayanchaur during the morning and daytime is very low and mostly consists of males in the age group of 25–60. In the evening time, the calisthenics park is mostly dominated by young male groups.

Also, the time people spend in the park is significantly lower in the case of Narayanchaur as compared to that in Shankha Park. People spending less than 1 hour in the park is significantly high, which implies that the park cannot hold the visitors and that visitors use the park as a stop rather than for recreational purposes. This is due to the lack of varied activities in the park. In the case of Shankha Park, most people spend 1 to 2 hours in the park, and some of them spend more than 2 hours as well. This shows that the park has the capacity to hold its visitors, which implies that some people feel at ease spending their leisure time in the park.

The survey also shows that most of the visitors visit the park for walking, jogging, and physical exercise purposes, and some of them visit because of the green space. A very low proportion of people visit the park because of their children, which might be due to a lack of proper children's play areas in both the parks.

6.2.2 Site Observation

Both parks have adequate seating areas, but only the Shankha Park has shade and more climate-friendly sitting facilities. This has made Narayanchaur less appealing to use in times of sunny and rainy weather conditions. The field observation also found that the park users in Narayanchaur were none in the daytime, compared to Shankha Park, where there were 200 people even in the day. The public toilets are not freely accessible, as both parks have established a certain price for using the toilet; this might make it hard for certain groups, especially children and early teenagers, to use them. In addition, in Shankha Park, the unavailability of ramps at the entrance as well as inside the park makes it challenging for physically disabled people to use them. This condition is relatively better in

Narayanchaur, with the provision of a ramp at each entrance and flat terrain inside the park. Narayanchaur was more flexible in its usability as it was open to the public from 5am to 9pm with proper provision of lighting, whereas Shankha Park is closed after 7pm. Similarly, assessing connectivity showed that there was provision of walkways in the parks but proper directional signage was lacking. Both parks felt safe for both genders. There was proper provision of security personnel, which provided an increased sense of safety among the users. Vegetation was well maintained in both parks so that it would not hinder visibility. However, the fence and landscape elements in both parks were found to block the clear view from the street. Different age groups of people were found to use the park for several physical activities and as a place to stop and rest. In Narayanchaur, only 29.6% and 39.81% of the total users were female on weekdays and Saturday, respectively. Similarly, in Shankha Park, the percentage of females was 31.9% of the total on both weekends and weekdays.

Beyond fundamental accessibility and safety, the look, feel, and functionality of these locations in the public realm can have a big impact on whether or not a person wants to spend time and participate there (STORRING, 2021). Although both the parks are safe for visiting, the percentage of women visiting the park is significantly lower, which might be due to the lack of activities that could fulfill the needs of women of different age groups. On observation of both the parks, certain groups of females were missing from the park, like girls of the early teen age group (12-16 years old), women with toddlers, people with disabilities, elderly people (especially women) and teenage boys who are more into sports. The activities provided in Narayanchaur are significantly less, which are only provided for youth groups. In the case of Shankha Park, the activities provided more adequately meet the needs of children, physically active people, and the elderly. So, in order to make the park inclusive and vibrant, the varied activities targeting the need of different age group and gender.

CHAPTER SEVEN: CONCLUSION AND RECOMMENDATIONS

The research found out that the park planning and designing process of Shankha Park was by no means gender inclusive and participatory. This led to the exclusion of the female perspective in the planning and designing process. Narayanchaur, on the other hand, was designed later than Shankha Park. Females were engaged in the designing process. Participation of the community was also ensured during the planning phase, but unfortunately, there was no female participation. The study revealed that even though the park was being used frequently and considered safe by a substantial number of people, female park users were significantly fewer in number than males. So, we can say that no or limited involvement of females in the planning process has rendered the park gender neutral. Since women and men perceive reality differently and females have different needs than males, gender-neutral space does not cater to the demands of women completely. Hence, to achieve an inclusive space, female participation is a must in all planning and implementation phases of public spaces. Special pull factors need to be created in the parks to ensure increased women's participation. In our context, women are deemed more responsible for household activities and their children. Therefore, programs related to child care, such as daycare facilities and feeding rooms within the park, will encourage women to visit and spend more time in the park. The play space in Narayanchaur dedicated to callisthenic activity attracted more boys and created a male-dominated space, making females uncomfortable to participate in that area. Rather than establishing one large space that a single group can dominate, splitting it into sections could create a comfortable environment for girls to use the space. Further, it was also found that more than 90% of the people using the park reside within a 30-minute walk of the park.

Other Recommendations:

- Gender Differences and Gender Dynamisms one of the most important things to take into account while design of public space.
- Create the Multifunctional space with varied activities to fulfill the need of people of different age group and gender. A multi-functional space is a full integration of several functions in both time and space.

- More emphasis should be placed on "planning cities with women" rather than "planning cities for women," i.e., encouraging more women participation in policy making and city planning processes at the grassroots level in order to integrate their state of perception. Women's safety, needs, and requirements are rarely reflected in urban planning policies.
- Include diversity of People in Design/Planning Team and Policy making Process.
- A written guideline is necessary to assist local planning authorities in incorporating gender issues into planning.
- Planning and constructing urban spaces like streetscapes, nodes, or squares for genders of various age groups should be done in accordance with their demands in order to maximize space usage and promote social interactions in order to accomplish a goal of gender equality.
- Attract women and girls of different age group to park by identifying their specific needs.
- Conduct awareness campaign on Gender sensitization and Empower women to motivate them to actively participate in the planning process.
- Local planning authorities need to produce gender-disaggregated statistical data on the needs of different genders in each district.

Parks should be viewed as a crucial component of the public domain, which are effective in terms of gender and social interactions. An enhancement Projects involving parks should improve the environment to provide both a public realm and a diversity of user activities in order to socialize. As Jan Gehl says: "...in a good environment, a completely different, broad spectrum of human activities is possible". (Jan-Gehl-and-Birgitte-Svarre, n.d.)

A well-planned public park can accommodate a variety of activities, without any disagreements between users, and which are simultaneously used by Men and Women. It's also vital to note that a successful park does not just appear abruptly, without considering the diverse cultures, and necessities of the population. The creation of public space in cities is subject to numerous research in an urban setting. Public areas can serve as the reflections of the city. Being a gathering spot for friends and a place to unwind or

any other variety of activities enhance the city's social environment. So, Public Parks must be maintained because communities require a wider range of social interactions that take place in public.

Strategies for creating inclusive Public Space

A space can be made more accessible to women, girls, and families by using thoughtful design, which can also assist in removing obstacles that prevent women from using public areas.

The stakeholders involved in planning or designing of any public space are majorly client, consultant and the people/ beneficiaries.

Here, the client acts as a decision maker, Consultant acts as moderator or designer who shape the space and people act as a user. So, for a project to be inclusive, each and every aspects of the planning should be inclusive which is explained as follow:

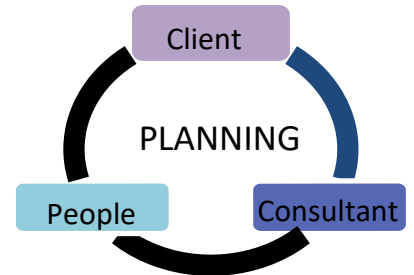


Figure 24: Stakeholders in Planning

Inclusive Policy Makers:

While creating the policies regarding public space, the policy making team should incorporate diversified people including Gender experts, women planners, sociologist etc.

Inclusive Design Team/ Planning Team:

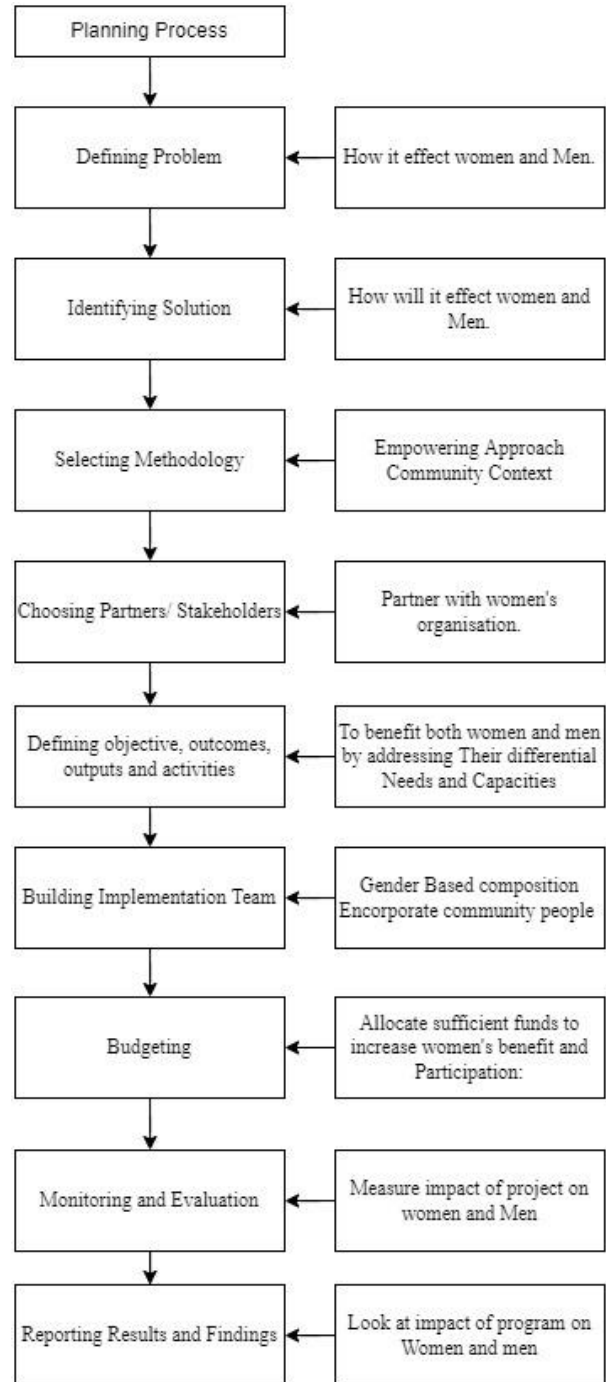
"If you look at successful teams, they include diversity in the design team and in their policy-making process." (STORRING, 2021) So, in order to create an inclusive public space, diversity of experts should be included in the design team.

Planning Steps with Gender Perspective

Planners and designers involved in the design of the public space should be gender sensitive and should analyze every situation with the gender perspective. Every aspects of the planning should be looked through the gender lens.

The flow chart shows the gender perspective which should be looked at in every steps of planning.

Furthermore, apart from gender perspective, the participatory planning process should be followed. Community people of different age group and gender should be encouraged to participate so as to identify their needs and provide the activities that could fulfill their needs. Making space for individuals to engage in civic, physical, and social activities is a major goal of a public place. As many people from the community as possible should be included in the designs.



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ANNEXES

Annex 1: List of KII

Ar. Bharat Sharma - Designer of Shankha Park

Mr. Harisharan KC – Site office Head, Shankha Park

Ar. Prabal Thapa – Designer of Narayanchaur

Mrn Narendra Bahadur Shrestha- President of Community Service Center, Naxal

Annex 2: Questionnaires of the experts (Designer and Management team)

Annex 3: Questionnaire Survey

Annex 4: Shankha Park Photos

Annex 5: Narayanchaur Photos

Annex 6: Research Paper Published in IOE Graduation Conference

Annex 2



Tribhuvan University
Institute of Engineering
Pulchowk Campus
M Sc Urban Planning Program

Questionnaire for Interview with the Experts

Title of the Thesis: “Gender Inclusiveness in the Planning of Urban Spaces”

Objective of the Study: To explore how the Urban Spaces is being Designed/ Planned.

Consent from the interviewee

The survey will be conducted completely anonymously. I will group all information I have gathered and analyze to reach logical conclusion for my study. I will use the information and publish in my research thesis and paper. Would you be willing to participate voluntarily in the survey?

Yes No

Please ask any question if you have about the research.

Name of the Interviewer: _____ **Date:** _____

Name of the Key Informant: _____

Designation/Institution: _____

Gender M F

Age Group 30-40 yrs 41-50 yrs 50-60 yrs >60yrs

Questionnaire

- 1. What is the history behind the park? How the space was used before the construction of the park? (Use of Space by Men and Women)**

Ans:

2. Who were involved in the design of park? Was the Gender issue considered during design? (Design Team)

Ans:

3. Was the existing surrounding condition and community studied before designing?

Ans:

4. Who were the stakeholders/beneficiary of the project? On what Basis they were identified.

Ans:

5. How much Targeted population the park was designed for?

Ans:

6. Was community participation encouraged during the design process? What was the process to engage community?

Ans:

7. Was it expert led design or community lead design?

Ans:

8. For which age group of population was the design of park was targeted?

Ans:

9. What do you think about Gender Inclusion?

Ans:

10. Were you conscious about Gender inclusion while designing the park?

Ans:

11. Were the client conscious about Gender Inclusion?

Ans:

12. How are you looking back to your own design and construction?

Ans:

13. Now, what do you think about Design, Design Process and Product?

Ans:

14. If you get another chance to redesign this project, what changes you would like to make in the existing design?

Ans:

Annex 3



Tribhuvan University
Institute of Engineering
Pulchowk Campus
M Sc Urban Planning Program

Questionnaire

Title of the Thesis: “Gender Inclusiveness in the Planning of Urban Spaces”

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Consent from the interviewee

The survey will be conducted completely anonymously. I will group all information I have gathered and analyze to reach logical conclusion for my study. I will use the information and publish in my research thesis and paper. Would you be willing to participate voluntarily in the survey?

Yes No

Please ask any question if you have about the research.

Name of the Interviewer: _____ **Date:** _____

1. Name of the Respondents: _____ (Not Compulsory)

2. Gender:

Male Female Other

3. Age Group:

15-25 yrs 25-40 yrs 40-60 yrs >60yrs

4. Educational Level:

Primary School

Secondary School

High School

University Graduate

Masters/ Doctorate

5. Employment Status:

Student

Working

Unemployed

Retired

6. Marital Status:

Married

Unmarried

Widow

7. Having Children: Yes No

8. Do You Visit to Nearby Park?

Yes No

If Yes,

9. Frequency of Using Park?

Everyday

4-6 times a week

2-3 times a week

1-2 times a week

Few times in a month

Rarely

10. How much time do you spend on the park?

Less than 1 hour

1 to 2 hour

More than 2 hour

**If No,
Why not?**

What is your Daily Routine?

11. Time Preferred for using Park.

Morning

Day

Evening

12. Distance from Living place to Park.

Less than 10 min (<1km)

10 to 30 min (1-2km)

30-60 min (2-4km)

More than 60 min (>4km)

13. Means of Transportation to Park.

Walking

Bicycle

Private Vehicle

Public Vehicle

14. Main purpose of using park.

Walking

Because of Children's play area

Green Space

Friends Meeting

Pet Walk

15. Which area you use the most while in Park?

Outdoor Seating areas

Covered Seating

Green Lawn

Children's Play area

Tree garden

Safety and Security Conditions of Parks and Related aspects

16. Are there people or group of people within the park that makes you feel unsafe?

Yes

No

17. Do you feel the park is safe for all users?

Yes

No

18. Preference of Being accompanied

Yes

No

If Yes, With Whom?

My spouse

Friends

Family

Girl or Boy Friend

Pet

Gender Analysis Tool- Access and Control Profile

| Elements of Shankha Park | Access | | Control | |
|--|---------------|--------------|----------------|--------------|
| | Men | Women | Men | Women |
| Green Lawn | | | | |
| Outdoor sitting Area | | | | |
| Covered Space | | | | |
| Tree Garden | | | | |
| Children Play Area/Calisthenics Park | | | | |
| Outdoor Gym Area | | | | |
| Pati Near Temple | | | | |

Annex 4:Shankha Park Photos

Shankha park (Morning Time @ 6:00 am) various activities at various spaces of the Park



Figure 1 : Peoples in doing physical exercise in Outdoor Gym Area of the Park



Figure 2: Peoples doing Zumba in the Tree Park



Figure 3: Peoples doing exercise in the amphitheater with green lawn of the Park



Figure 4 : Peoples around the Temple area of the Park



Figure 5: Peoples doing Yoga in the Pati of the Park



Figure 6: Peoples in the Walkways of the Park

Shankha park (Day Time @ 2:00 pm) various activities at various spaces of the Park



Figure 7 : Elderly people gathering in the Park

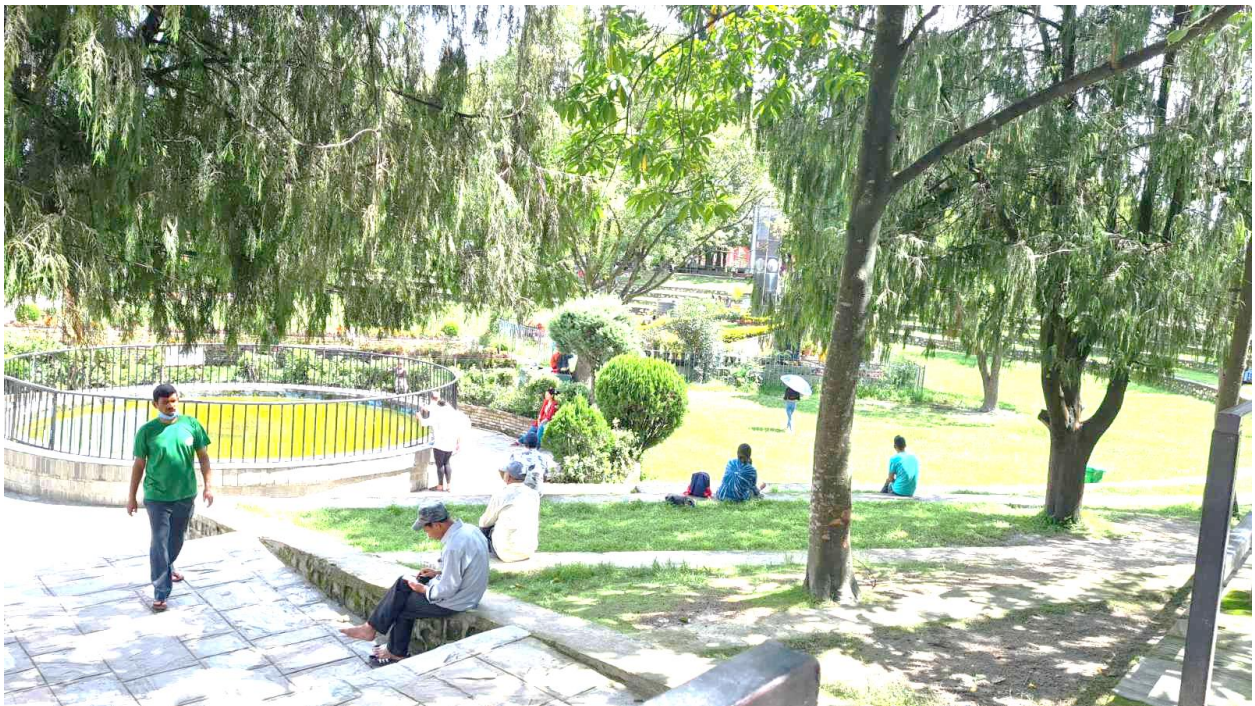


Figure 8 : People resting in the shade of tree in the green Lawn



Figure 9: People sitting in central Green Lawn



Figure 10: Peoples in outdoor sitting area



Figure 11 : Peoples in Tree park



Figure 12: Outdoor Gym Area

Shankha park (Saturday) various activities at various spaces of the Park



Figure 13: Peoples in Central Green Lawn



Figure 15: Peoples in Tree Park



Figure 14: Peoples in Children's Play area



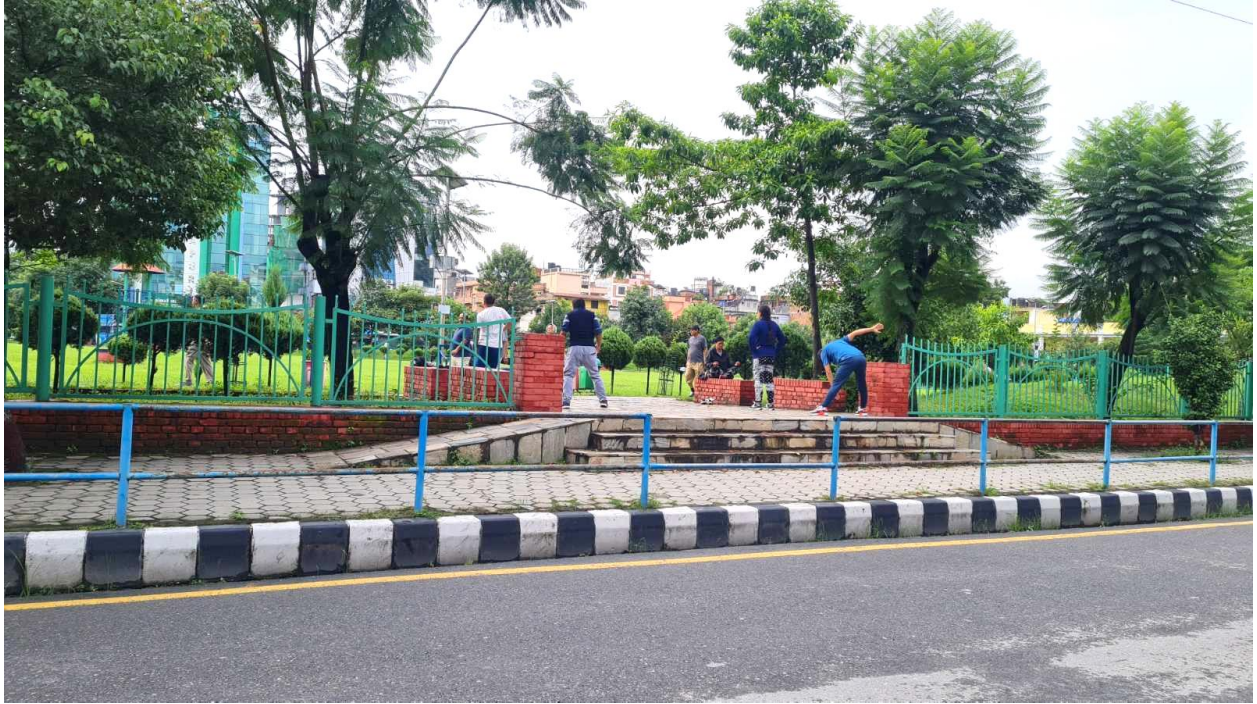
Figure 17: Peoples in Outdoor Gym Area



Figure 16: Peoples Around Stambha

Annex 5: Narayanchaur Photos

Narayanchaur (Morning Time @ 6:00 am) various activities at various spaces of the Park



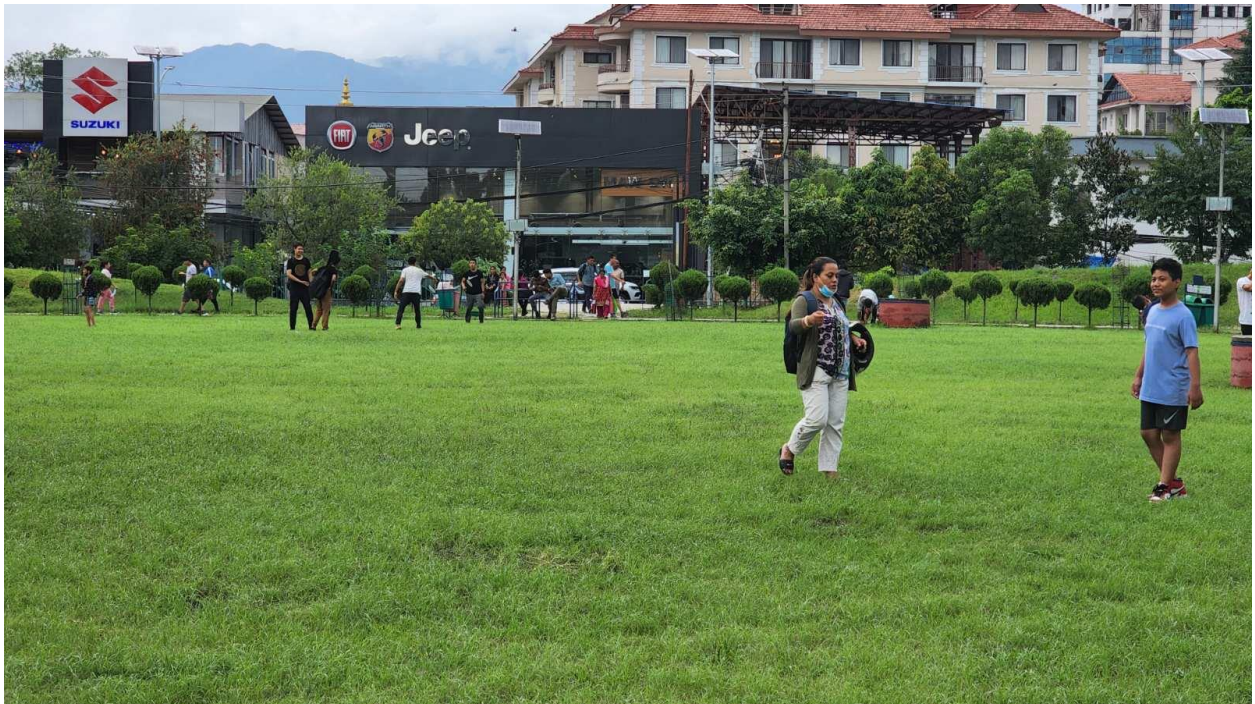


Narayanchaur (DayTime @ 2:00 pm) various activities at various spaces of the Park



Narayanchaur (Evening @ 5-6 pm) various activities at various spaces of the Park





Narayanchaur (Saturday) various activities at various spaces of the Park





त्रिभुवन विश्वविद्यालय
Tribhuvan University
इन्जिनियरिङ अध्ययन संस्थान
Institute of Engineering

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फोन- ५५२१५३१, फ्याक्स- ५५२५८३०

Date: September 14, 2022

To Whom It May Concern

This is to confirm that the paper titled "*Gender Inclusiveness in the Planning of Urban Spaces*" submitted by **Astha Acharya** with Conference ID **12335** has been accepted for presentation at the 12th IOE Graduate Conference being held in October 19 – 22, 2022 at Thapathali Campus, Kathmandu.

Khem Gyanwali, PhD
Convener,
12th IOE Graduate Conference



Gender Inclusiveness in the Planning of Urban Spaces

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Abstract

Due to the difference in the biological and social need of men and women in urban society, they have different ways of using public spaces. Such concerns are rarely addressed in the planning process. Therefore, cities planned and built in gender-neutral ways limit women and girls from exploiting the city's infrastructure and services equitably. This paper aims to identify the extent to which gender inclusivity is considered during the planning stage of urban spaces in Kathmandu and what impact it has on the designed space's gender inclusiveness. It was found that there was limited involvement of the female in the planning and designing process of the parks. The infrastructure of the park was found gender neutral and the percentage of females using the park was significantly lower than males. This was due to the lack of incorporation of a female perspective in the design. Hence, functions such as child cares in parks and less male-dominated spaces need to be integrated into the design through female participation starting from the planning phase to render the urban spaces gender-inclusive.

Keywords

Gender, Inclusion, Urban Spaces, Gender Inclusiveness

1. Introduction

Most people today agree that more than half of the world's population lives in cities and that urbanization is leading to exponential growth in cities. The experiences of people in cities, as well as how they use public spaces, are greatly influenced by their gender, even if everyone can see the effects of urbanization [1]. Cities could be considered a place where an individual could obtain a peaceful, healthy, and prosperous life. Hence, cities should be able to accommodate the socioeconomic and gender dynamism within them, so that gender equality, women's and girls' empowerment, poverty reduction, job opportunities, and equitable prosperity can be achieved [2]. Despite this, cities have also resulted in persistent socio-economic inequalities, segregation, and exclusion [3]. In the urban context, various forms of violence against women and girls are prevalent in every country, which even extends to online spaces [4]. This condition is even worse in underdeveloped and developing countries. In 2012, UN Women's "Safe City Delhi Programme" had a key finding that a significant number of women and girls felt their cities,

as well as neighborhoods, were not a safe place for them. Hence, urban spaces planned and designed in a women-centric way can only help us to achieve SDG 5, Target 5.1, "Eliminate all of the violence against all women and girls in public and private spaces." This will ultimately support attaining SDG 11 of making cities inclusive, safe, resilient, and sustainable.

With a diversity of ages, races, language, geographic regions, religion, caste, cultural, economic and political backgrounds, urban areas are made up of about an equal number of men and women. But throughout history and to this day, cities have been planned, developed, and governed without equal participation from women in positions of decision-making. So, to achieve an inclusive, safe, resilient, and sustainable city, women's requirements and interest must be addressed, and they must be included in the planning process, whether they are policymakers or planners. Integrating the varied experience and needs of women in urban planning and design is the likely way to achieve gender inclusivity.

2. Research Objective

The main objective of this research is to evaluate gender inclusiveness in the planning of urban spaces in Kathmandu valley. The specific objectives are:

- To explore how urban spaces are being designed/planned.
- To evaluate whether or not the designed space is gender inclusive.

3. Scope and Limitations

The research is focused on gender-inclusive issues (male and female only) in a public park. Other urban spaces like sidewalks and streets, civic buildings, bus stations, etc., are not considered in this research. The study is dependent on the views of the respondents (key personnel, park users, and community personnel). Hence, the analysis and results might not be relevant to other projects.

4. Literature Review

Gender is a socioeconomic characteristic that aids in analyzing how men and women behave in various contexts, as well as their duties, opportunities, and demands [5]. Women and men of all ages and sexual orientations must be treated equally to fully exercise their rights, participate in and gain from political, social, and economic development, and participate in decision-making. Inequality and exclusion are ongoing trends in cities, and especially women, suffer from systematic gender-based discrimination [6]. A paradigm shift in terms of the processes of policymaking and citizen education for making full use of the city’s public goods and services is necessary for women to play a part in their cities’ stories [7]. Women’s engagement in urban life is further limited by gender-insensitive planning and design processes. Gender-sensitive planning guarantees that gender concerns and implications found through gender analysis are addressed during the planning, design, and implementation phases. Community context, inclusion process, inclusive design and program, and sustaining inclusion could be considered guiding principles for creating healthy places [8]. Furthermore, gendered space could be successfully produced through means such as architectural design based on the gender of the architects, the interpretive lens of architectural

criticism and theory, and by using, occupying, and transforming everyday activities [9]. Public spaces should be designed so that they support inclusiveness, meaningful activities, comfort, safety, and pleasurable [10]. The World Bank has proposed several metrics for evaluating public space, including infrastructure and comfort, connectivity, public safety, occupancy, and lighting.[11]

5. Methodology

The Interpretive paradigm, also called social constructivism, is used for guiding this research because the research topic deals with socially constructed realities. The ontological position of this research is that the usability and safety perception of urban space vary with its user’s and planner’s gender, as males and females perceive the space differently. Epistemologically speaking, the valid source of knowledge for this study is the direct interaction with the users and the key personnel who are directly involved in the planning process. A qualitative method is used to determine the inclusiveness of the urban public. In-depth interviews with designers, direct observation of the study area, and a semi-structured questionnaire survey to measure the usability and users’ perspective of the park were conducted.

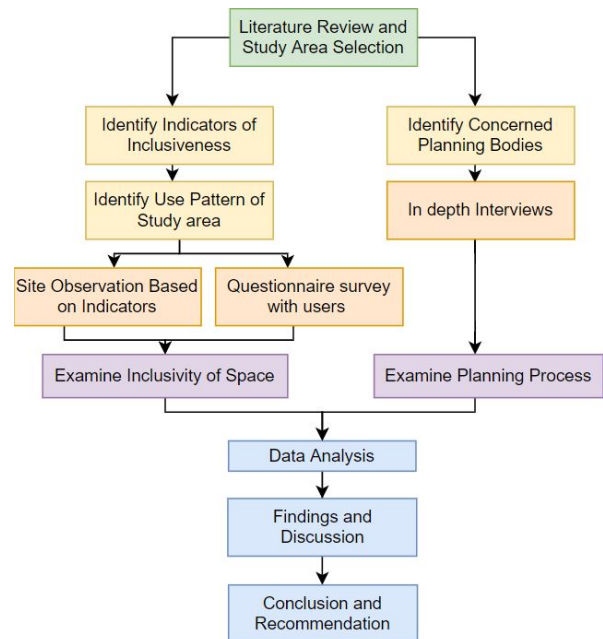


Figure 1: Research framework

6. Study Area

For this study, two cases of public open space are chosen, whose planning team and the process will be analyzed and tested against various gender-inclusive indicators to find whether the space designed is gender-inclusive or not. The case area is selected based on various factors such as it is a free and flexible space, accessible to all, and most importantly, it is listed in the Nepal Gazette so that it can serve as a disaster relief space as well.

Shankha Park: Shankha Park is located on the northern side of Kathmandu. The park has a 21-2-0-1.98 ropani area and is situated in Chhappal Karkhana, Kathmandu. The park was designed by architect Bharat Sharma was established in 2042 B.S. to commemorate the Panchayat Silver Jubilee. Hence, it is also known as the Panchayat Silver Jubilee Park. Currently, the park is owned by K.M.C.

Narayanchaur (Nandakishwor Bagaicha):

It is located at Naxal, which is in the northeast part of the Kathmandu valley inside the ring road. It covers an area of 26-10-0-1 ropanies as mentioned in the list of gazette open spaces. "Parbal Thapa Architects" designed this park and presented its masterplan to the Kathmandu Valley Development Authority (KVDA) in 2013. It was made open to the public a few months before the earthquake.



Figure 2: Study Area(Narayanchaur and Shankha Park)

7. Data Collection

7.1 Key Informant Interview (KII)

Designers of both parks were systematically interviewed about the procedures followed during park design and the people involved in the design process. In addition, key personnel currently involved in the operation and management of the park were

also interviewed.

7.2 Site Observation

This method of data collection was carried out by visiting the particular public space at various times during the weekdays and weekends. The park was visited 3 times a day: in the morning at 6:00 am, daytime at 2:00 pm, and evening at 6:00 pm. The composition of the visitors and use of the various parts of the park were observed.

7.3 Questionnaire Survey

Convenience sampling was done to administer the semi-structured questionnaire to the park users and community people. Questionnaire was divided into three section. The first section included basic information of the respondent such as gender, age group, educational level, employment status and marital status. The second section included information about the usability of the park, such as frequency, time preferred, distance travelled, means of transportation, time spent, and most importantly, the main purpose of using the park. The third section included information about the safety and security conditions of the park.

7.4 Sample Characteristics

Among the 102 respondents of Shankha Park, 53 were female and 49 were male. And, among the 60 respondents of Narayanchaur, 30 were female and 30 were male. Various age groups of people categorized as 15–25 years, 25–40 years, 40–60 years, and >60 years were selected to participate in the survey so as to get the view of people of all age groups.

8. Analysis and Discussion

8.1 Indicators Identification

Based on in-depth literature review following factors were identified to understand, if a public space is well designed and gender-inclusive or not in context of Kathmandu:

- Infrastructure and Comfort
- Connectivity
- Public safety
- Occupancy
- Lighting

The selected site areas are assessed on the basis of these identified indicators.

8.2 Examining the Planning process

Shankha Park:

It was designed by Ar. Bharat Sharma with the concept of blending the site factors and use factors. Also, the paradigm of unification of Nepal was shown with the focal stone stumbha with a conch on the top. It was designed and implemented to commemorate the Panchayat’s silver jubilee around BS 2042 on vacant public space. Architect Bharat Sharma was the only person involved in the design of the Shankha Park, and community people were also not involved because, in those days, there was no question of Participatory Planning in practice. The park was designed to facilitate all the people with free access. According to Ar. Bharat Sharma, the park was designed to facilitate people of all ages. But during that period, neither the peoples or community participation and gender was an issue nor Nepal government have any priority for the gender issue. Hence, the design of the park was expert-led without involving the community people. This leads to the fact that the overall design process was not inclusive due to the governance system at that time.

Narayanchaur:

The Narayanchaur at Naxal was designed by ”Prabal Thapa and Architects” with the concept of converting the open land into a multipurpose park. Community Service Center- Naxal initiated the revival of Nandi Keshwor Bagaincha, Narayanchaur with the scope of providing a dynamic public space that pays homage to local history, promotes citizen engagement, provides environmental benefit to the community, and develops the open field as a digester risk management park. During the process, a sub committee was formed by the community service center for the planning and construction of Narayanchaur, but the community itself was not inclusive at all.

Architect Parbal Thapa, along with architect Liza Pradhan, designed the park. The stakeholders for this project were the community people of Naxal, who were mostly an elite group. This design of the park was a community-led design, technically supported by the experts. While designing the park, the designers were conscious of gender equality, so the private corners are minimized in the design and all the parts of the park are clearly visible for safety purposes. The

park was designed so that people of all ages, from children to the elderly, could enjoy it. Although the design was community-driven, the involvement of girls and women in the planning process itself was negligible. Therefore, the process of planning the park was not inclusive.

8.3 Examining the Inclusivity of Space

8.3.1 Examining the usability of Space via Survey

To examine the usability of space, several important questions on usage patterns, favorite times, and modes of transportation to parks, primary reasons for visiting parks, and the park areas that visitors frequent the most were asked to respond. 18.29% of the males and 13.41% of females visit Shankha Park on a regular basis, where as in the case of Narayanchaur 12.28% of males and 3.51% of females visit the park on a regular basis. This regularly visiting population are the ones of the age group 25 to 60 who visit the park for jogging, yoga, Zumba, and physical exercise during the morning and some people of the age group 60+ who visit the park for meeting and gathering purposes. They are mostly retired people who use the park to spend their leisure time.

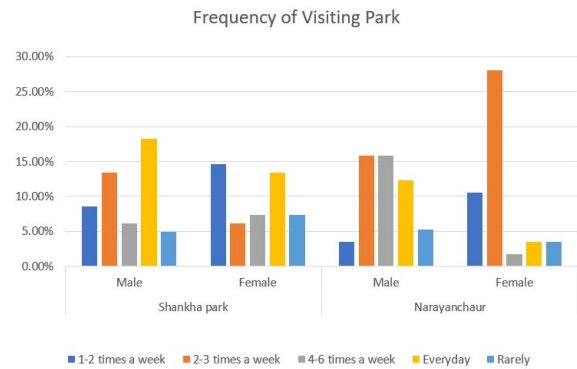


Figure 3: Frequency

The survey showed that, 23.17% of the males and 23.17% of the females prefer to visit Shankha Park at evening time, where as in the case of Narayanchaur 22.81% of males and 38.60% of females prefer to visit the park at evening time. Similarly, 7.32% of males and 10.98% of females prefer to use the park in the daytime. These populations are mostly housewives, retired or unemployed. But in the case of Narayanchaur, the number of people visiting the park during the day is almost negligible, which is due to the lack of proper seating spaces that can protect them from harsh climatic conditions and a lack of activities

as well. This shows that the park is not being used to the extent it could have been used.

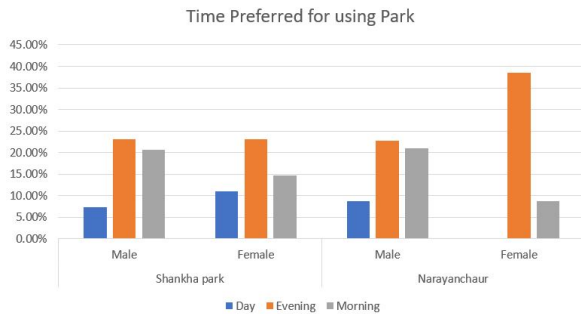


Figure 4: Time preferred

The survey showed that most of the visitors spend 1-2 hours in both parks, usually in the morning and evening hours of the day. In the case of Shankha Park, 12.20% of males and 3.66% of females spend more than 2 hours in the park, and these are the ones who usually use the park in the daytime. But in the case of Narayanchaur, no one seems to spend more than 2 hours in the park. This is again due to the lack of activities in the park.

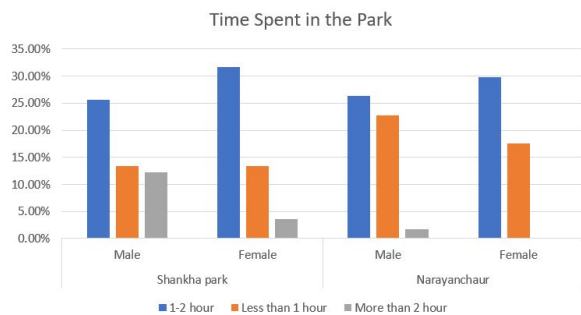


Figure 5: Time spent

Also, the survey shows that most of the visitors visit the park for walking, jogging, and physical exercise purposes, and some of them visit because of the green space. A very low proportion of people visit the park because of their children, which might be due to a lack of proper children’s play areas in both the parks.

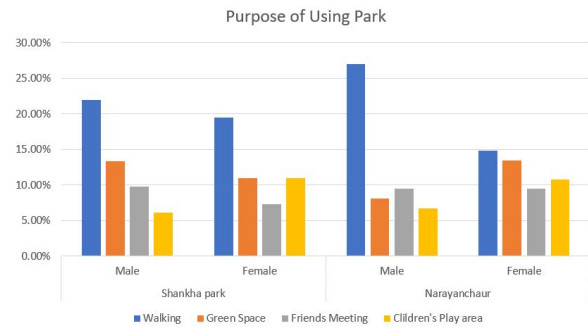


Figure 6: Purpose

8.3.2 Site Observation

Both parks have adequate seating areas, but only the Shankha Park has shade and more climate-friendly sitting facilities. This has made Narayanchaur less appealing to use in times of sunny and rainy weather conditions. The field observation also found that the park users in Narayanchaur were none in the daytime, compared to Shankha Park, where there were 200 people even in the day. The public toilets are not freely accessible as both parks have established a certain price for using the toilet; this might make it hard for certain groups, especially children and early teenagers, to use it. In addition, in Shanka Park, the unavailability of ramps at the entrance as well as inside the park makes it challenging for physically disabled people to use them. This condition is relatively better in Narayanchaur with the provision of a ramp at each entrance and flat terrain inside the park. Narayanchaur was more flexible in its usability as it was open to the public from 5am to 9pm with proper provision of lighting where as Shankha Park is closed after 7pm. Similarly, assessing connectivity showed that there was provision of walkways in the parks but proper directional signage was lacking. Both parks felt safe for both genders. There was proper provision of security personnel, which provided an increased sense of safety among the users. Vegetation was well maintained in both parks so that it would not hinder visibility. However, the fence and landscape elements in both parks were found to block the clear view from the street. Different age groups of people were found to use the park for several physical activities and as a place to stop and rest. In Narayanchaur, only 29.6% and 39.81% of the total users were female on weekdays and Saturday, respectively. Similarly, in Shankha Park, the percentage of females was 31.9% of the total on both weekends and weekdays.

| Aspects of Inclusivity | Variables | Shankha Park | Narayanchaur |
|----------------------------|---|---|---------------|
| Infrastructure and Comfort | Presence of Ramps for Physically Disabled People | No | Yes |
| | Well maintained and adequate Public Toilet | Not Free | Not Free |
| | Rubbish Bins | Yes | Yes |
| | Place to sit and Rest | Yes | Yes |
| | Climatic comfort of the space- Shade and Shelter | Yes | No |
| | Vendors or kiosks | Yes | No |
| | Lights | Yes | Yes |
| | Presence of posted signs to exclude certain people or behaviors | No | No |
| Connectivity | Easy access | No | No |
| | Are sidewalks surrounding the Public Space? | No | Yes |
| | Do people take designated path to go where they want to go? | Yes | Yes |
| | Nearby stops for enhanced connectivity? | Yes | No |
| | Adequate directional signage | No | No |
| Public Safety | Clear sight lines within public space and from street or entrance? | No | Yes |
| | Overgrown or non-maintained vegetation that hinders visibility? | No | No |
| | Are there fences or walls that blocks clear pathway to exits? | Yes | No |
| | Is there any visible policing? | Yes | Yes |
| | If yes, when are they on duty? | 9am to 6pm | 24 hour |
| | Are there people or group of people within the park that makes women feel unsafe? | No | No |
| | Is there the presence of alcohol or drug Dealing? | No | No |
| Occupancy | Are there people using public space? And at what times? | Yes | Yes |
| | What types of activities people are engaged in ? | Mix | Mix |
| | Are people using the space to stop and rest, or are they passing through it? | Stop and Rest | Stop and Rest |
| | What are the areas that people are using the most? | Different area are used by different group of people. | Green Lawn |
| | Is there the mix of men, women, girls and boys using the public space? | Yes | Yes |
| | Is the space accessible to people with disabilities or with special needs? | No | Yes |
| Lighting | Existing lights in Working Conditions | - | Yes |
| | Are lights distributed evenly so all part of the Public space are well Lit? | No | Yes |

Figure 7: Site Observation

9. Conclusion and Recommendations

The research found out that the park planning and designing process of Shankha Park was by no means gender inclusive and participatory. This led to the exclusion of the female perspective in the planning and designing process. Narayanchaur, on the other hand, was designed later than Shankha Park. Females were engaged in the designing process. Participation of the community was also ensured during the planning phase, but unfortunately, there was no female participation. The study revealed that even though the park was being used frequently and considered safe by a substantial number of people,

female park users were significantly fewer in number than males. So, we can say that no or limited involvement of females in the planning process has rendered the park gender neutral. Since women and men perceive reality differently and females have different needs than males, gender-neutral space does not cater to the demands of women completely. Hence, to achieve an inclusive space, female participation is a must in all planning and implementation phases of public spaces. Special pull factors need to be created in the parks to ensure increased women’s participation. In our context, women are deemed more responsible for household activities and their children. Therefore, programs related to child care, such as daycare facilities and feeding rooms within the park, will encourage women to visit and spend more time in the park. The play space in Narayanchaur dedicated to callisthenic activity attracted more boys and created a male-dominated space, making females uncomfortable to participate in that area. Rather than establishing one large space that a single group can dominate, splitting it into sections could create a comfortable environment for girls to use the space. Further, it was also found that more than 90% of the people using the park reside within a 30-minute walk of the park. Hence, the government should consider this tendency to establish parks to ensure increased use of parks among city residents.

Acknowledgments

The authors are grateful to the Department of Architecture, Institute of Engineering, Pulchowk Campus. The authors also want to thank all of the survey participants who participated in the study. Finally, the authors would like to express their gratitude to all the people who contributed to the study, both directly and indirectly.

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Thesis Presentation on
Gender Inclusiveness in the Planning of Urban Spaces

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Institute of Engineering
Msc. In Urban Planning
Department of Architecture

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Date:
21st sept 2022

Picture Source : The Himalayan Times

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| | | | 05 Literature Review |

01
INTRODUCTION

Introduction
4

Gender Gender refers to **“the cultural and social characteristics attributed to men, women and LGBTQ on the basis of perceived biological differences.”**

Inclusiveness According to Cambridge Dictionary inclusiveness is **“the quality of including many different types of people and treating them all fairly and equally”**

Gender Inclusion Gender inclusion is a notion that **all services, opportunities, and establishments are open to all people** and that male and female stereotypes do not define societal roles and expectations.

<https://online.maryville.edu/online-bachelors-degrees/liberal-studies/guide-to-gender-inclusion/#--text=Gender%20inclusion%20is%20a%20concept%20define%20social%20order%20and%20expectations>

Introduction 5

Our Living environment is shaped by our culture, values, lifestyle and
 It define the relation between **us and various urban Function.**

Cities- a place where one can obtain **Peaceful, Healthy and Prosperous Life.** Hence, should be able to accommodate **Socioeconomic and Gender dynamism**→ Achieve **Gender equality, women's and girls' empowerment**, poverty reduction, job opportunities, and equitable prosperity (MoUD, 2016)

Urban Problem Faced by Gender

- Inequality and exclusion / Gender Based Discrimination
- Physical and Mental Violence
- Sexual abuse and inappropriate Touching
- Sexual harassment and intimidation in urban spaces

Introduction 6

National Statics relevant to Gender equality and Inclusion

- Gender inequality index → **0.452** (HDR,2019)
Rank of Nepal → 142nd (1st Norway → 0.045)
- Violence against women ever experienced → **25%** (NPC,2020)
- Proportion of seats held by women in Federal Parliament → 33.5%
- Proportion of seats held by women in Provincial assemblies → 34%
- Women's participation in Public Service → 13.6% (NPC,2020)
- Women's in Public sector decision making level → 13.6% (NPC,2020)
- Women's in Private sector decision making level → 29.6% (NPC,2020)

Introduction 7

Urban spaces **planned and designed in Gender sensitive** way can only help us to achieve :

- **SDG 5 Gender Equality** target 5.1 "Eliminate all of the violence against all women and girls in public and private spaces".
- **SDG 11** of making cities inclusive, safe, resilient, and sustainable.

03

RESEARCH OBJECTIVE

Need of Research

- *"Men, women, gender minorities, and people of different abilities tend to use the public space in different ways"*
- Although, women make up significant proportion of the total population, cities have been **Planned, Designed, and Governed** without their equal participation as decision makers throughout history and to this day.

Objective of Research

- To explore **how the Urban Spaces is being Designed/ Planned.**
- To evaluate **whether or not the designed space is gender inclusive.**
- To develop the strategies that would further help to plan the space that is more inclusive.

Research Objective
9

Limitation of research

- The study is dependent on the key personnel's opinions.
- As the data collected is qualitative and subjective in nature, there may exist a great deal of bias, which might mislead the research. The analysis and results may vary with the projects.
- The research is only focused on gender inclusive issues.
- This study is limited to the case of open spaces and parks. Other urban spaces like sidewalks and streets, civic buildings, bus stations, etc., are not considered in this research.
- In this research, Gender issues is limited to Men and Women. Other Gender like LGBTQ.. are not taken into account.

Research Objective
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04

CONCEPTUAL FRAMEWORK

Paradigm: Interpretivist

Ontological claim: Usability and safety perception of space varies with its user (male and female) and also this space is differently perceived by male and female planner while planning.

Epistemology: valid source of knowledge for this study is the direct interaction with the key personnel who are directly involved in the planning process

Research Methodology:
Qualitative Research

Conceptual Framework
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graph TD
    A[Literature Review and Study Area Selection] --> B[Identify Indicators of Inclusiveness]
    A --> C[Identify Concerned Planning Bodies]
    B --> D[Identify Use Pattern of Study area]
    C --> E[In depth Interviews]
    D --> F[Site Observation Based on Indicators]
    D --> G[Questionnaire survey with users]
    E --> F
    E --> H[Examine Planning Process]
    F --> I[Examine Inclusivity of Space]
    G --> I
    H --> I
    I --> J[Data Analysis]
    J --> K[Findings and Discussion]
    K --> L[Conclusion and Recommendation]
    
```

Conceptual Framework
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Methods

Literature Review- To identify the Indicators

Site Observation

Questionnaire Survey- To know about the behavior of Park users

Key Informant Interview

Focused Group Discussion- To interact with the community People

05

LITERATURE REVIEW

Literature Review
15

Gender Sensitive Planning

- Guarantees **gender concerns and implications** found through gender analysis are addressed during the **planning, design, and implementation phases.**
- Seeks to ensure **equitable opportunities and equal outcomes for women and men.**

Inclusivity

- Open to Everyone and not limited to certain group of people.

*"A safe city is one that promotes the elimination of **gender-based violence**, while at the same time promoting equal opportunities for men and women in all the spheres of social, economic, cultural and political life (access to employment, education, political participation, resources and leisure, etc.)."*

Literature Review
16

Urban Space

- Areas related to multicentric municipalities forming a whole.
- Is characterized by:

| | | | |
|-------------------|-----------------------|-------------------------|-----------------|
| | Urban Space | | |
| i. Size | | | |
| ii. Shape | Market Places | City Squares | Civic Buildings |
| iii. Scale | Public Open Spaces | Bus parks/Transport Hub | |
| iv. Density | Sidewalks and streets | | |
| v. Land Uses | | | |
| vi. Building Type | | | |

Literature Review
21

Evaluating Inclusivity

Handbook for "Gender Inclusive Urban Planning and Design" have given indicators to evaluate the Inclusivity of Public Space.

- Infrastructure and Comfort**
 - Are there well maintained and adequate public toilets for both men and Women?
- Connectivity**
 - Are there ramps to access by physically disabled people?
- Public Safety**
 - Are there the rubbish bins throughout the public space?
 - Are there the place to sit and rest?
- Occupancy**
 - Is there adequate shade?
- Lighting**
 - Are there vendors or kiosks?

Literature Review
22

Evaluating Inclusivity

- Infrastructure and Comfort**
 - Is the public space easily accessed from the surrounding neighborhood?
- Connectivity**
 - Are there the sidewalks surrounding the public space?
- Public Safety**
 - Are there transit stops located nearby for enhanced connectivity?
- Occupancy**
 - Is there adequate directional signage within the space?
- Lighting**

Literature Review
23

Evaluating Inclusivity

- Infrastructure and Comfort**
 - Are there the clear sight lines within the public space? Is the interior of the space visible from the street or entrance?
- Connectivity**
 - Is there the overgrown or non-maintained vegetation that hinders visibility?
- Public Safety**
 - Are there fences or walls that blocks clear pathway to exits?
- Occupancy**
 - Is there any visible policing? If so, when are they on duty?
- Lighting**
 - Are there people or group of people that makes women feel unsafe?
 - Is there the presence of Alcohol or Drug Dealing?

Literature Review
24

Evaluating Inclusivity

- Infrastructure and Comfort**
 - Are there people using public space, and at what time?
- Connectivity**
 - What types of activities are people engaged in?
 - What are the areas that people are using the most?
- Public Safety**
 - Is there a mix of men, women, girls and boys using the public space? What ages?
- Occupancy**
 - Is the space accessible to people with disabilities?
- Lighting**

Literature Review
25

Evaluating Inclusivity

Infrastructure and Comfort

Connectivity

Public Safety

Occupancy

Lighting

- Are the existing lights in working condition?
- Are the lights distributed evenly so all part of public space are well lit?

06

STUDY AREA

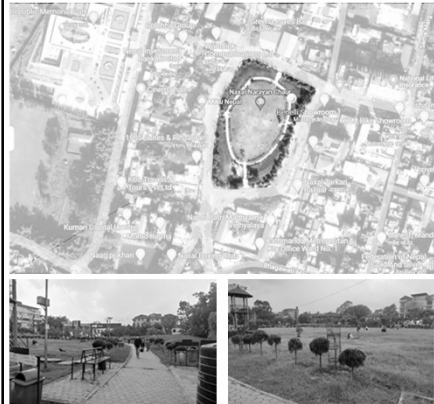
Study Area
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Selection of Study Area

Selection of Study area is based on:


- ❑ **Free and Flexible Space**
So Open Space/ Park is taken instead of other Public Space.
- ❑ **No entry Fee and accessible for all**
Although Mall is public space which entry is free, but it does not incorporate all groups of people and does not serve as a Free Space.
- ❑ **Compare two cases**
So both the case taken is of similar nature.
- ❑ **Listed in Rajpatra (Nepal Gazzate)**
So that it can serve as Disaster relief Space

Study Area
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Case 1 : Narayan Chour

- Located in ward 1 of KMC, Naxal
- Known as Nandi Keshwor Bagaicha
- It was turned into an open garbage disposal site.
- Restoration began in 2012.
- 10,266 sq.m
- 5 am to 9pm




About the Location (Ward 1) Study Area 29

- Surrounding Tangal on east Kamal Pokhari on South Narayanhiti Palace on West Gairidharaon North
- As per 2011, Total Population: 8,008
Male Population: 4,194
Female Population: 3,814 (47.63%)

Case 2 : Shankha Park Study Area 30

- Located in ward 4 of KMC, Chhapal Karkhana
- Established in 2042 BS commemorate **Panchayat Silver Jubilee**
- Construction completed 2 years back only.
- Designed by Ar. Bharat Sharma.
- Area: 10,751 sq.m approx.
- Opens at 5am and closes at 7pm



About the Location (Ward 4) Study Area 31

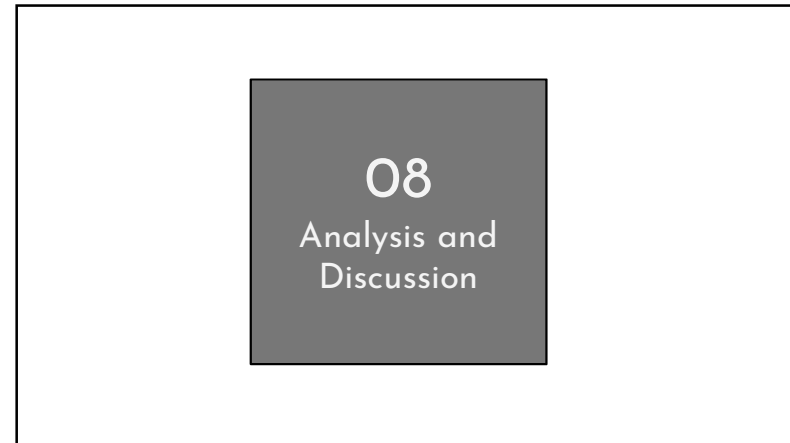
- Surrounding Mandikatar Kapan on east Dhumbarahi on South Chandole on West Maharajgunj on North
- As per 2011, Total Population: 47,362
Male Population: 23,788
Female Population: 23,574 (49.77%)

07

Data Collection

| | |
|---------------------------------|--|
| Key Informant Interview | <ul style="list-style-type: none"> · Designer of both Park · Key Personnel of Management Team |
| Site Observation | <ul style="list-style-type: none"> · By visiting both the park during weekdays and weekends. · 3 times a day: 6am, 2pm and 6pm |
| Questionnaire Survey | <ul style="list-style-type: none"> · Basic information of Respondents · Information on usability of park · Safety and Security condition |
| Sample Characteristics | <ul style="list-style-type: none"> · 102 respondents in Shankhapark (53 female and 49 male) · 60 Respondents in Narayanchaur (30 female and 30 male) |
| Focused Group Discussion | <ul style="list-style-type: none"> · Age Group- 15-25years, 25-40 years, 40-60 years, and 60+ |

Data Collection
33



| | |
|---|---------------------|
| Examining Planning Process | Data Analysis 35 |
| Shankha Park | |
| <ul style="list-style-type: none"> • Designed by Ar. Bharat Sharma in 2042 BS to commemorate Panchayat's silver jubilee. • Purpose to create urban space for all. • Concept to facilitate people of all age group. • Expert Led Design. • No community Participation • Gender issues was not in priority for Nepal Government as well. • Hence, the Planning process is not inclusive. | |
| <p>Committee member in Shankha Park: 10 including management, gardening and cleaning (2 female in cleaning)</p> | |

| | |
|--|---------------------|
| Examining Planning Process | Data Analysis 36 |
| Narayanchaur Committee member in Narayanchaur Park: 9 (2 female) | |
| <ul style="list-style-type: none"> • Designed by "Prabal Thapa Architects" with concept to create multipurpose park. • Initiated by Community service center with the scope of providing a dynamic public space that pays homage to local history, promotes citizen engagement, provides environmental benefit to the community, and develops the open field as a digester risk management park. • Community-led design, technically supported by the experts. • To facilitate people of all age group. • Although the design was community-driven, the involvement of girls and women in the planning process itself was negligible. • Hence, planning process was not inclusive. | |

Examining the inclusivity of Space

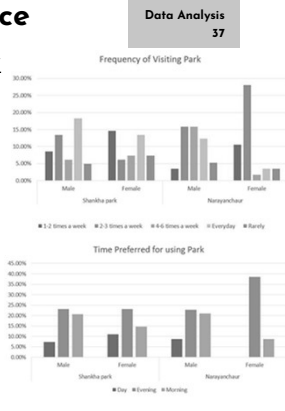
Examining usability of Space via Survey

1. Frequency:

Most of the male and female visit Shankha Park on a regular basis, where as in the case of Narayanchaur, it is significantly low especially for female.

2. Time Preferred:

In both the park, most of the people prefer to visit in evening time. In case of Narayanchaur, people visiting at day is significantly low which might be due to lack of proper infrastructure that can protect from harsh climate condition.



Examining the inclusivity of Space

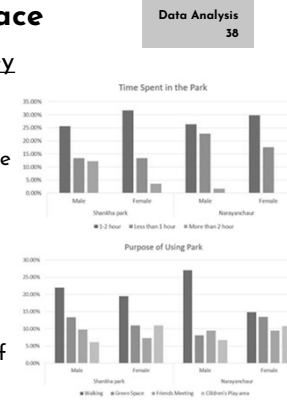
Examining usability of Space via Survey

3. Time Spent:

Most of the visitors spend 1-2 hour in the park. In case of Narayanchaur, People spending time less than 1 hour is significantly high which is due to the lack of activities.

4. Purpose:

Most of the visitors visit park for walking and physical exercise purpose and some for green space. Significantly low proportion of people visit park for their children which is because of lack of proper play area, child care and feeding rooms etc.



Examining the inclusivity of Space

Site Observation

- Lack of Climatic comfort sitting space in Narayanchaur.
- Lack of freely accessible public toilets which makes hard for certain groups.
- The access of both the park is not easy due to lack of proper footpath in case of Sankha Park, and due to high speed vehicles in Narayanchaur.
- Lack of Ramps in Sankha Park, excluding people with disabilities.
- Presence of security personnels in both the park have enhances the sense of safety condition.
- Blocked visibility of park from the street questions the safety condition in both the park.

| Aspect of Inclusivity | Variables | Shankha Park | Narayanchaur |
|----------------------------|--|--------------|--------------|
| Infrastructure and Comfort | Presence of ramps for physically Disabled People | No | Yes |
| | Well maintained and clean Public Toilets | Not Found | Not Found |
| | Availability of Benches | Yes | Yes |
| | Presence of shade | Yes | Yes |
| Connectivity | Presence of footpaths to connect Shankha and Narayanchaur | Yes | No |
| | Presence of footpaths to connect Shankha Park to Public Transport | Yes | Yes |
| | Are people take designated path to go where they want to go? | Yes | Yes |
| | Availability of ramps for wheelchair accessibility | Yes | No |
| Public Safety | Presence of security guards | Yes | Yes |
| | Presence of surveillance cameras | Yes | Yes |
| | Are there people using public space at night time? | No | Yes |
| | Are there people or group of people using the park that makes women feel unsafe? | No | No |
| Accessibility | Are there people using public space at night time? | Yes | Yes |
| | Are there people using public space at night time? | Yes | Yes |
| | Are people using the space to stop and sit, or are they passing through it? | Yes | Yes |
| | Are there people using public space at night time? | Yes | Yes |
| Lighting | Are there people using public space at night time? | Yes | Yes |
| | Are there people using public space at night time? | Yes | Yes |
| | Are there people using public space at night time? | Yes | Yes |
| | Are there people using public space at night time? | Yes | Yes |

Observation & Counting (Shankha Park)

Saturday

- People visiting the park on Saturday is much more than other weekdays
- Counting from 4-4:30
- Mostly the flow of people increases after 3:00 pm
- Male: 270**
- Female 230 (46%)**

Morning 6:00 am

- Activities:** Jogging, Zumba, Yoga, Physical Exercise

- Age Group** Mostly 25-40 and 40-60

Male- 180
Female- 90 (33.33%)

Day 2:00 pm

- Activities:** Sedentary Activities only

- Age Group** Mostly 40-60 and 60+ years

Male- 140
Female- 60 (30.0%)

Evening 6:00 pm

- Activities:** Sedentary Activities and Walking

- Age Group** Mostly 15-25 and 25-40

Male- 110
Female- 40 (26.27%)

Data Analysis
41

Observation & Counting (Narayanchaur)

Saturday

- People visiting the park on Saturday is similar to other weekdays
- Mostly the flow of people increases after 3:00 pm
- Counting from 4 to 6pm
- Male: 334**
- Female 221 (39.81%)**

| | | |
|---|--|--|
| <p>Morning 6:00 am</p> <ul style="list-style-type: none"> Activities: Jogging, Physical Exercise Age Group: Mostly 25-40, 40-60 and 60+ Male- 50 Female- 15 (23.07%) | <p>Day 2:00 pm</p> <ul style="list-style-type: none"> Park is empty at this time because of sun and no shade | <p>Evening 6:00 pm</p> <ul style="list-style-type: none"> Activities: Sedentary Activities and Walking Age Group: Mostly 15-25 and 25-40 and childrens Male- 38 Female- 22 (36.67%) |
|---|--|--|

Data Analysis
42

Gender Analysis via Focused Group Discussion

- Access and Control Tool**

It differentiates between **access to a resource** and **control over decisions** regarding its allocation and use.

The profile examines the extent to which **women are impeded from participating** equitably in projects.

Community people do not visit park because of :

- Their busy schedule.
- They don't feel going there.
- Teen age girls feel awkward visiting the park.

| Elements of Shankha Park | Access | | Control | |
|------------------------------|--------|-------|---------|-------|
| | Men | Women | Men | Women |
| Amphitheatre with Green Lawn | ♂ | ♀ | ♂ | ♀ |
| Outdoor sitting Area | ♂ | ♀ | ♂ | ♀ |
| Covered Space | ♂ | ♀ | ♂ | ♀ |
| Tree Garden | ♂ | ♀ | ♂ | ♀ |
| Children Play Area | ♂ | ♀ | ♂ | ♀ |
| Outdoor Gym Area | ♂ | ♀ | ♂ | ♀ |
| Path Near Temple | ♂ | ♀ | ♂ | ♀ |

09

Conclusion and Recommendation

Conclusion
44

Conclusion

- Lack of **Gender inclusive and participatory planning** led to exclusion of female perspective in the design of the park.
- Although both the parks are safe for visiting, the percentage of women visiting the park is significantly low So, we can say that no or limited involvement of females in the planning process has rendered the park gender neutral.
- Also, on observation of both the park, certain groups of female were missing in the park like girls of early teen age group (12-16 years old), women with toddler, people with disabilities, elderly people (especially women) and Teen age boys who are more into sports.

Recommendation Recommendation 45

- **Special pull factors** need to be created in the parks to ensure increased women's participation.
- Include diversity of **People in Design Team and Policy making Process**.
- Incorporate **specific interest activities for different age group and gender** in to the design of Public park.
- In our context, women are deemed more responsible for household activities and their children. Therefore, **programs related to child care** within the park can help women visit and spend more time in the park.
- Create the **Multifunctional space with varied activities** to fulfill the need of people of different age group and gender.

Recommendation Recommendation 46

- More emphasis should be placed on "**planning cities with women**" rather than "planning cities for women," i.e., **encouraging more women participation in policy making and city planning processes at the grassroots level** in order to integrate their state of perception.
- A written guideline is necessary to assist local planning authorities in incorporating gender issues into planning.
- Conduct awareness campaign on **Gender sensitization and Empower women** to motivate them to actively participate in the planning process.
- Local planning authorities should develop **gender-disaggregated statistical data** on the needs of men and women in each district.

Strategies for creating Inclusive space Recommendation 47

- A space can be made more accessible to women, girls, and families by using thoughtful design, which can also assist in removing obstacles that prevent women from using public areas.

Inclusive Planning Step with Gender Perspective Recommendation 48

| | |
|---|---|
| Defining Problem | How it effect women and men. |
| Identifying Solution | How will it effect women and men. |
| Selecting Methodology | Empowering approach, Community Context |
| Choosing Partners/ Stakeholders | Partner with women's organization |
| Defining objective, outcomes, output and activities | Address the different need and capacity |
| Building Implementation Team | Gender based composition, community people |
| Budgeting | Allocate sufficient fund to increase women's benefit and meaningful participation |
| Monitoring and Evaluation | Measure impact of project on women and men |
| Reporting Results and Findings | Look at the Impact of program |

THANK
YOU

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