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# 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. 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 pleasurability [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.

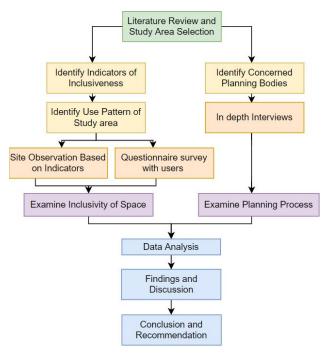


Figure 1: Research framework

# 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.

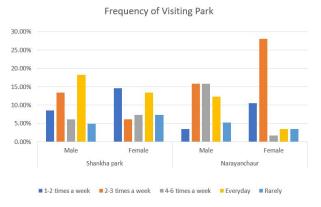


Figure 3: Frequency

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.

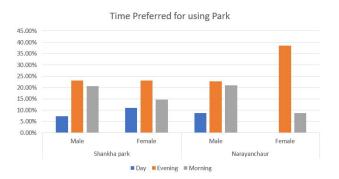


Figure 4: Time prefered

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.

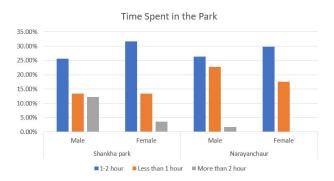


Figure 5: Time spent

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.

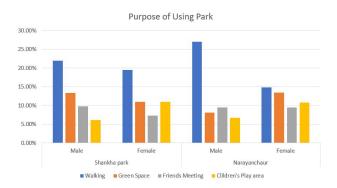


Figure 6: Purpose

#### 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.

**Table 1:** Site Observation

Aspects of Inclusivity	Variables	Shankha Park	Narayanchaur
inclusivity	Presence of Ramps for Physically Diabled People	No	Yes
	Well maintained and adequate Public Toilet	Not Free	Not Free
	Rubbish Bins	Yes	Yes
Infrastructure		Yes	Yes
and Comfort	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

## 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.

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