



# Report on **ACCESSIBILITY AUDIT** in Kathmandu, Nepal







Kathmandu Metropolitan City,  
Government of Nepal





# **Report on Accessibility Audit in Kathmandu, Nepal**

## **Published by:**

National Federation of the Disabled – Nepal (NFDN).  
In Partnership with CBM

In Collaboration with Kathmandu Metropolitan City (KMC).  
Technical collaboration with Square Unit PVT. LTD.

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**ISBN: 978-9937-9226-4-7**

First Edition: December, 2018

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Square Unit PVT. LTD. has technically participated throughout the process of developing the accessibility audit tools, procedures, checklists for conducting the audit and preparing this report.

# Preface

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Every individual has the right to live his or her life with dignity and achieve full potential. However, a majority of places across the world have yet to incorporate the needs of the persons with disabilities, as a result of which, their access to opportunities often gets compromised. The environment we live in thus must be free from any physical and/or conceptual or any other forms of barriers if we are to ensure independence, convenience and safety for all, including the persons with disabilities. This brings the issue of accessibility for people with various types of disabilities on the forefront.

The Government of Nepal is principally committed to making all public infrastructures and services accessible, inclusive and resilient for all, including Persons with Disabilities, by complying with the Convention on the Rights of Persons with Disabilities (CRPD 2006) and the United Nations' Agenda for Sustainable Development Goals 2030. The Nepal government has addressed the issue of the persons with disabilities in the Constitution of Nepal 2015 and has formulated the Disability Rights Act in 2017, including other relevant legal frameworks.

As the state party of CRPD, the Government of Nepal is morally bound to take effective measures to ensure all the physical infrastructures, transportation, information and communications, including information and communications technologies and systems and other facilities and services are accessible for the persons with disabilities and that all public places follow the minimum accessibility standards and principles of universal design that addresses the need of Persons with Disabilities including the elderly, children and pregnant women.

The Goal 3 of Incheon Strategies 2013-22 has also recognized the importance of accessibility audits to ensure accessibility and emphasized the need to cover all stages of the process of planning, design, construction, maintenance, monitoring and evaluation. Putting it into consideration, NFDN carried out an accessibility audit in 150 public infrastructures that included government buildings, health posts, hospitals, schools and colleges, roads, sidewalks, amusement parks, supermarket and malls, hotels and restaurants using structured tools and scientific methods. A list of comprehensive audit tools was selected after several rounds of formal and informal consultation meetings with various stakeholders like KMC, DPOs alliance, CBMNCO and a group of technical persons and experts that we call resource pool.

We take pride in presenting this report that is an overview on the status of implementation of "Accessible Physical Infrastructure and communication Services Directive for persons with disabilities 2013" and other national and international commitments Nepal has made at the ground level. Advocates, activists, organizations, individuals or groups working round the clock to raise awareness on disability can refer to or use the findings and recommendations of this report. Likewise, the government can use them as guidelines in decision-making, policy formulation and execution.

**Shudarson Subedi**  
**National President**  
**National Federation of the Disabled, Nepal (NFDN)**

# Message From CBM

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I would like to congratulate National Federation of the Disabled-Nepal (NFDN) for publishing this report on accessibility audit for the first time in Nepal. I would also like to thank all those contributors for helping materialize this report.

Accessibility audit, indeed, is a systematic process of assessing the access of diverse users' communities into any services or products, built environment or transports based on the checklist. Though the Government of Nepal has promulgated an Accessible Physical Structure and Communication Service Directive for Persons with Disabilities 2069, it lacks many aspects for an effective implementation.

With an aim to fill up this gap, CBM in partnership with NFDN, has developed the Comprehensive Accessibility Audit Checklist through a participatory process with direct engagement of various user communities like disabled people organizations, Persons with Disabilities, architects, universities, government representatives, constructional professionals, and media among others. After drafting the Accessibility Audit Checklist, it has been tested and verified by auditing 150 samples of 10 different sectors in Kathmandu valley. Therefore, this report is a result of systematic assessment of the 150 samples of Kathmandu, Lalitpur and Bhaktapur that draws the picture of the status of accessibility how diverse communities are facing the barriers to access the services.

Accessibility can never be ensured through negative criticism in a developing and underdeveloped countries like ours. Therefore, we should always move forward with an appreciative approach. Eventually, I fully believe that this report will give an outstanding reference to accessibility practitioners in future to ensure and promote accessibility in an advanced manner leaving no one behind as envisaged by the current 2030 Agenda for Sustainable Development.

**Krishna Bahadur Sunar**  
**Program Officer for Disability Inclusion**  
**Nepal Country Office**  
**CBM International**

# Acknowledgement

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We are privileged to announce that NFDN has successfully completed the accessibility audit of Kathmandu valley including 150 public infrastructures and services (samples) in Kathmandu, Bhaktapur and Lalitpur districts and produced this report. The Comprehensive Checklist for the accessibility audit was the first to ever be prepared in Nepal after rigorous review of various relevant literatures and consultations with concerned stakeholders and experts.

We are indebted to all the team members and volunteers of Square Unit Pvt. Ltd. for their tireless efforts from the initial phase, from developing the accessibility audit tools, procedures, checklists to conducting the audit and preparing this report.

Our special thanks goes to Kathmandu Metropolitan City (KMC), CBM NCO team, DPOs alliance and all members of the resource pool who persistently contributed their knowledge, expertise and experience to enhance the entire audit process. We also owe our gratitude to DPOs representatives from all three districts for coordinating for the audit at the local level.

We are highly indebted to Mr. Bimal Paudel, Program Coordinator of NFDN, Mr. Milan Bagale, Accessibility Specialist, Mr. Manish Prasai, Admin and Program Chief of NFDN, Mr. Krishna Sunar, Program Officer and Mr. Benzamin Drad, Accessibility Advisor of CBM International, whose valuable support, comments and inputs made the process more effective and produced this comprehensive and meaningful report. We are also thankful to Ms. Sarah Sapsanamma Rai for editing the language of the report.

We are equally thankful to NFDN's board and staff member, and all stakeholders whose persistent support has been invaluable in completing the task.

# Acronyms

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ADA	: American Disability Act
CRPD	: Convention on the Rights of Persons with Disabilities
DOR	: Department of Road
DOTM	: Department of Transport Management
DPOs	: Disabled People's Organizations
DPWA	: Disabled Protection and Welfare Act
DUDBC	: Department of Urban Development and Building Construction
ICT	: Information and communication technologies
KMC	: Kathmandu Metropolitan City
MOUD	: Ministry of Urban Development
NCO	: Nepal Country Office
NFDN	: National Federation of the Disabled, Nepal
NPPAD	: National Policy and Plan of Action on Disability
NRA	: National Reconstruction Authority.
SDGs	: Sustainable Development Goals
UNCRPD	: United Nations Convention on the Rights of Persons with Disability

# Executive Summary

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From a human rights perspective, everyone has right to participate in any form of social, economic or political activity within his or her society or public spaces. However, accessibility plays a crucial role in pursuing these activities. The accessibility audit is one of the first of many steps that can help in improving access to the built environment, transport system, communication services or any other infrastructure.

Thus, the Government of Nepal is principally committed to making all public infrastructures, information & communication services and other services accessible, inclusive and resilient for all including Persons with Disabilities, adhering to the Convention on the Rights of Persons with Disabilities (CRPD 2006), SDG goal 11 of Agendas 2030, New Urban Agenda, Constitution of Nepal 2015, Disability Rights Act 2017 and other legal frameworks. As the state party of CRPD, the Government of Nepal is obliged to take all possible effective measures to ensure that all public physical infrastructures, associated facilities, communication & information systems/services, and other services are accessible and usable for Persons with disabilities and all citizens, following the minimum accessibility standards and Principles of Universal Design. Moreover, Goal 3 of Incheon Strategies 2013-22 has emphasized on enhancing the access of Persons with disabilities to the physical environment, public transportation, knowledge, information and communication. These legal commitments have underlined the importance of access audits for ensuring accessibility for all. They also cover all stages of the process of planning, design, construction, maintenance, monitoring and evaluation.

Accessible Physical Infrastructure and Communication Services directive for People with Disability 2013, that includes a number of guidelines along with minimum standards, specifications and their technical requirements, is a key legal measure taken by the government for promoting accessibility. To supplement the government's initiation in achieving the goal of making inclusive society for all, NFDN, in partnership with CBM, carried out accessibility audit of 150 public infrastructures as a model initiative. This included government buildings, public parks and open spaces, roads and streets, corporate sectors, commercial sectors and other infrastructures within Kathmandu valley and identified the remedial actions needed to make these sectors accessible for all including Persons with disabilities. To achieve this, a set of comprehensive audit tools and checklists were developed through several formal/informal consultation meetings with various stakeholders such as KMC, DPOs alliance, resource pool (a group of technical persons and experts), CBM NCO and others. Out of the 150 samples within Kathmandu valley, 132 samples were found to be inaccessible whereas 18 samples were partially accessible and none of the samples were found to be fully accessible in line with the government standards.

The government thus immediately needs to take effective measures to address the current condition and ensure proper implementation of the approved accessibility standards. Programs like accessibility audit must be performed across the nation to recommend potential improvements in line with the approved accessibility standards. The government needs to monitor the implementation of the accessibility standards through a joint monitoring mechanism and engage the INGOs, NGOs, DPO, private sectors, development partners and construction professionals towards raising awareness on Accessibility and Universal Design, accessibility audit, accessible constructions and necessary corrections or improvements.

# Table of Content

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<b>1</b>	<b>Introduction</b>	<b>12</b>
1.1	Background	12
1.2	Problem Statement for Audit	14
1.3	Questions for Audit	15
1.4	Objectives	15
1.5	Delimitation	15
<b>2</b>	<b>Methods</b>	<b>22</b>
2.1	Preparation of Checklist	20
2.2	Testing the checklist	21
2.3	Sampling	21
2.4	Site Audit	22
2.5	Report preparation	23
<b>3</b>	<b>Literature Review</b>	<b>26</b>
3.1	Universal Design	24
3.2	Some Legal Provisions and Commitments on Accessibility	25
3.2.1	International Provisions and Commitments	25
3.2.1.1	United Nations Convention on the Rights of Persons with Disability	25
3.2.1.2	Incheon Strategy	25
3.2.1.3	Sustainable Development Goals (SDG)	26
3.2.1.4	New Urban Agendas	27
3.2.1.5	The Sendai Framework for Disaster Risk Reduction 2015-2030	28
3.2.2	National Provisions	28
3.2.2.1	Act Related to the Rights of Person with Disabilities, 2074 (2017)	
3.2.2.2	Accessible Physical Infrastructure and Communication Services for People with Disability, 2069 B.S (2013)	30
3.2.2.3	Inclusive Education Policy for Persons Disabilities 2072 (2016)	30

# 4 Findings 33

4.1	Situation of Individual Sectors	31
4.1.1	Public Service Establishments	32
4.1.2	Health Sector	34
4.1.3	Educational Sector	36
4.1.4	Financial and Corporate Sector	38
4.1.5	Recreation and Entertainment Sector	40
4.1.6	Sports and Fitness Sector	42
4.1.7	Religious Sector	44
4.1.8	Hotel, Resorts and Restaurants	46
4.1.9	Public Toilet	48
4.1.10	Transportation Sector	50
4.2	Situation Analysis of Each District	51
4.2.1	Situation of Kathmandu District	51
4.2.2	Situation of Lalitpur District	52
4.2.3	Situation of Bhaktapur District	53
4.3	Situation of Kathmandu Valley	54
4.4	Problem Statement	55
4.4.1	Approaching the Infrastructure	55
4.4.2	Parking	55
4.4.3	Paths Around Infrastructure	56
4.4.4	Ramp and Curb ramp	56
4.4.5	Staircase	57
4.4.6	Main Entrance	57
4.4.7	Reception	58
4.4.8	Corridors	58
4.4.9	Lifts	59
4.4.10	Signage	59
4.4.11	Drinking Water Facility	59
4.4.12	Sanitary Facility	60
4.4.13	Emergency Exit	60



## **5 Issues for Consideration 61**

5.1	Infrastructure - Accessible Design	61
5.1.1	Paths around Infrastructure	61
5.1.2	Parking	61
5.1.3	Paths around Infrastructure	62
5.1.4	Ramps	62
5.1.5	Staircase	62
5.1.6	Doors	62
5.1.7	Interior Accessible Route	63
5.1.8	Lift	63
5.1.9	Sanitary Facilities	63
5.1.10	Signage	63
5.2	Awareness	64
5.3	Attitudinal Behaviour	64
5.4	Plans	66
5.4.1	Short Term Plans	66
5.4.2	Long Term Plans	67
5.5	Tools, Technique and Procedure	67

## **6 Special Recommendations 68**

6.1	For the Government	68
6.2	For DPO and Other Civil Society Organizations	69
6.3	Private Sector	70
6.4	I/NGOs, UN Agencies and Other Development Partners	71

## **References 72**

# List of Tables

---

34

Table 1  
Public Service Sector

36

Table 2  
Health Sector

38

Table 3  
Educational Sector

40

Table 4  
Financial and Corporate  
Sector

42

Table 5  
Recreation and  
Entertainment Sector

44

Table 6  
Sports and Fltness  
Sector

46

Table 7  
Religious Sector

48

Table 8  
Hotel, Resorts and  
Restaurant Sector

50

Table 9  
Public Toilet

# List of Figures

---

**35**

Figure 1  
Accessibility status  
of public service  
sector within  
Kathmandu Valley

**37**

Figure 2  
Accessibility status  
in health sector  
within  
Kathmandu Valley

**39**

Figure 3  
Accessibility status  
of educational  
sector within  
Kathmandu Valley

**41**

Figure 4  
Accessibility status  
of finance sector  
within  
Kathmandu Valley

**43**

Figure 5  
Accessibility status  
of recreational  
sector within  
Kathmandu Valley

**45**

Figure 6  
Accessibility status  
of sports sector  
within  
Kathmandu Valley

**47**

Figure 7  
Accessibility status  
of religious sector  
within Kathmandu  
Valley

**49**

Figure 8  
Accessibility status  
of hotel/restaurant  
sector within  
Kathmandu Valley

**51**

Figure 9  
Accessibility  
status of public  
toilet sector within  
Kathmandu Valley

**52**

Figure 10  
Accessibility status  
of transportation  
sector within  
Kathmandu Valley

**53**

Figure 11  
Accessibility status  
in  
Kathmandu District

**54**

Figure 12  
Accessibility status  
in  
Lalitpur District

**55**

Figure 13  
Accessibility status  
in  
Bhaktapur District

**56**

Figure 14  
Accessibility status  
of  
Kathmandu Valley

# 1 | INTRODUCTION

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## 1.1. Background

Disability results from the interactions between personal impairments and attitudinal and environmental barriers that hinder their full and effective participation in the society on par with others. The United Nations Convention on the Rights of Persons with Disability 2006 defines Persons with Disabilities as those who have long-term physical, mental, intellectual or sensory impairments, which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others. Unsurprisingly, it defines problems arising through different barriers (conceptual, physical, communicational and institutional) that impede the participation of persons living with any kind of impairment in their daily activities leading to stigmatization and discrimination.

Persons with disabilities have been facing numerous barriers in accessing public infrastructures, transportation system and communication services. Eliminating such barriers will ensure accessible environment for all and help promote, protect and ensure full and equal enjoyment of all human rights and fundamental freedoms by Persons with disabilities.

Accessibility is a right as well as prerequisite for people living with different types of disabilities towards increasing their reach to any kind of facilities and services and to support their participation in society. It minimizes the barriers that Persons with disabilities and other diverse groups of people face in the pursuit of such activities. Therefore, ensuring accessibility is an integral part of various development initiatives we undertake to address peoples' needs.

It is the right of every individual to be able to participate in their family or community activities on an equal basis with others, irrespective of their physical, mental and sensory conditions. Such rights provide citizens with autonomy to pursue an active social and economic life. One of the key principles of United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) is that accessibility needs to be considered while implementing all other articles and relevant provisions. However, most often, Persons with Disabilities are forgotten, left behind and discriminated based on their physical, sensory and mental conditions.

In addition to contributing to a development of a more inclusive and equitable society, accessibility offers the following advantages:

- Accessible physical infrastructures, systems, services and facilities enable more people with disabilities and other diverse groups of people to use the infrastructures, services and facilities with equity and dignity.
- A working environment with good accessibility and mobility gives greater customer and staff satisfaction and can improve public perception and recognition about accessibility.
- Accessibility improves overall safety of the building, which has a direct impact on the number of accidents taking place and during different natural disasters.<sup>1</sup>

“To enable Persons with Disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to Persons with Disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas.” (CRPD, Article 9)

The accessibility audit is one of the first of many steps that can help improve access in the environment that we live in and provides the basis for improvement plans or strategies. It is a measure of how well built the environment is and whether the development and method of service delivery meets the needs of its users. It is also a process through which potential barriers to accessibility can be identified and recorded alongside suggested improvements in a way that enables people to be responsible for a site, building or service to move on the next step of planning and implementing the changes.

The basic principle of an accessibility audit is a comprehensive technical and scientific assessment of the accessibility condition of an environment, associated facilities and any services to be delivered from it, taking into account all existing and prospective users. If there are any national standards for accessibility in a place, the accessibility audit is carried out to check how far the built environment is in line with the standards and guidelines. Furthermore, the audit gives concrete recommendations for the improvement of the environment following nationally or universally approved standards of accessibility and revision/formulation of relevant legal provisions if necessary. The accessibility audit is equally important to

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<sup>1</sup> <http://nda.ie/Publications/Environment-Housing/Environment-Publications/Guidelines-for-Access-Auditing-of-the-Built-Environment.html> (June 02, 2018)

gather data of public structures and services for comparison or analysis; to check compliance with certain standards and regulations; develop policies on equal opportunities; improve public relations; generate pressure from lobby groups and create awareness of particular problems.

Carrying out an accessibility audit will identify a number of features including:

- The current status of accessibility of the buildings/property/site
- Areas for improvement (Long and short-term plans)
- Good/bad practices in relation to facilities management that an organization has in place.<sup>2</sup>

As said above, in Nepal, we find very few places where public infrastructure and services are built by following the minimum accessibility standards and Principles of Universal Design. Most of the public buildings, transportation services, roads and associated services in all cities of the country are not accessible and usable for Persons with disabilities and other diverse groups of people. Despite being the capital and one of the most developed cities in the country, Kathmandu Metropolitan City has failed to incorporate such facilities. NFDN

thus carried out accessibility audit of 150 public infrastructures as the model work, including government buildings, public parks and open spaces, roads and streets, corporate sectors, commercial sectors and others within Kathmandu valley and identified what remedial actions are necessary to make these sectors accessible.

“

**We have constructed a ramp and other features on our building. The ramp looks steep, but I am confident that wheelchair users can use it comfortably”,**

**(Voice of a corporate employee)**

## 1.2. Problem Statement for Audit

- Persons with disabilities and other diverse groups of people are facing numerous barriers and problems while accessing public physical infrastructures, means of transportation, information and communication services in their daily lives depriving them from even the basic entitlements.
- Lack of awareness about the necessity of accessibility and Universal Design principles among the concerned stakeholders.
- Lack of awareness about the barriers for Persons with disabilities and other diverse groups of people.

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2 <http://nda.ie/Publications/Environment-Housing/Environment-Publications/Guidelines-for-Access-Auditing-of-the-Built-Environment.html> (June 02,2018)

## 1.3. Questions for Audit

- Are the public physical infrastructures and other services designed, constructed or maintained considering the principle of 'access to all' Universal Design?
- Do the buildings/public spaces and their services follow the codes and national standards of accessibility and Principles of Universal Design?

## 1.4. Objectives

- To identify the major barriers that hinder accessibility of Persons with disabilities in public spaces in Kathmandu valley.
- To understand the current status of implementation of the accessibility related national standards and Principles of Universal Design in the public buildings and spaces.
- To identify areas of improvement in specific physical infrastructures as well as in larger scale for accessibility.

## 1.5. Delimitation

The audit mainly dealt with the design approach of different public buildings and public spaces of Kathmandu valley (Kathmandu, Bhaktapur and Lalitpur district), with respect to its buildings, transportation facilities, and communication and information services. The audit helped compare and analyze the buildings with reference to the provisions of UNCRPD Article-9 and the Accessible Physical Infrastructure and Communication Services Directive for People with Disability, 2013 and other legal frameworks. The audit was carried out only covering 150 samples from various sectors within Kathmandu valley. Since we could not reach all the major areas of the Kathmandu valley for access audit, we took some representative samples of the three districts: Kathmandu, Lalitpur and Bhaktapur. With limited resources and time, NFDN was determined to conduct the access audit of 150 samples (physical infra-structures and public services) in the representative areas throughout these districts. Since these three districts had a clear-cut variation in their population, geographical locations (coverage areas) and other features, the distribution of the sample size for our project was also different accordingly. Instead of being limited to only public buildings and spaces, we decided to take samples from various sectors, so that the real scenario of the Kathmandu valley could be portrayed in our report. The distribution of the sample size in each sector was also made different in accordance with their priorities and availability in our cities. Accessibility follows a chain of access in our day-to-day activities. All facilities and services should be accessible for anyone like our own house, streets, transportation

and communication facilities, buildings and public infrastructures to complete the chain of access. If one of the services is not accessible, the chain of access is not completed. However, the audit was focused only some of the parts of the chain of access. It tried to seek the chain of access only within a single structure. The audit showed the condition of accessibility in public buildings and communal spaces located within the Kathmandu valley. Though information and communication technologies (specially regarding the digital accessibility) play the vital roles in promoting the inclusive environment, these factors could not be included within the present audit process. Rather it had mainly dealt with the physical structures and information communications services available within those structures.

The findings of this report are based on the following conditions:

## **Reaching the Infrastructure**

- Not Available (-): If there is no parking space available.
- Not Accessible (NA): If the infrastructure is not accessible by public or private vehicles or if footpath leading to the infrastructure is not accessible.
- Partially Accessible (PA): If the infrastructure is accessible by private vehicles but not with public vehicles or footpath leading to the infrastructure.
- Accessible (A): If the infrastructure is accessible by public and private vehicles and by footpath.
- Fully Accessible (FA): If the infrastructure is accessible by public and private vehicles and the footpath meet all the accessibility standards.

## **Parking**

- Not Available (-): If there is no parking space available.
- Not Accessible (NA): If the parking space is not sufficient.
- Partially Accessible (PA): If there is parking space but no signage and accessible aisle.
- Accessible (A): If there is separate sufficient parking with signage but no accessible aisle.
- Fully Accessible (FA): If there is standard parking space available with standard signage as per audit questionnaire.

## **Ramps/Curb Ramps**

- Not Available (-): If the ramps and curb ramps are not available.
- Not Accessible (NA): If the slope of the ramps and the curb ramps are not up to the standards.
- Partially Accessible (PA): If the slope of the ramps and the curb ramps meets the standards but handrails and landings need interventions.
- Accessible (A): If the ramps and curb ramps meet the standards but with standard landings and handrails but needs minor interventions and signage.
- Fully accessible (FA): If the ramps and curb ramps meet the all the standards as per the audit questionnaire.



## Paths Around Infrastructure

- Not Available (-):
- Not Accessible (NA): If the paths around the infrastructures are not accessible i.e. if there are steps, no signage, unstable structures, no ramps and curb ramps, width not up to standards.
- Partially Accessible (PA): If the paths around the infrastructures are accessible with difficulty in some cases, but needs maintenance, signage.
- Accessible (A): If the paths around the infrastructures are accessible independently but minor interventions are required.
- Fully Accessible (FA): If the paths around the infrastructures is accessible independently for all user groups with proper signage as per audit questionnaire.

## Staircases

- Not Available (-): If the staircase is not available.
- Not Accessible (NA): If the staircase riser and tread do not meet the standards.
- Partially Accessible (PA): If the staircase riser and tread are in standard but the handrails are not up to standards or single handrails are provided.
- Accessible (A): If the staircase riser, thread and handrails are up to standards but need minor interventions and signage
- Fully Accessible (FA): If the staircase meets all the standards as per the audit questionnaire.

## Main Entrance

- Not Available (-): -
- Not Accessible (NA): If the main entrance is not accessible to all user groups.
- Partially Accessible (PA): If the main entrance is accessible but requires interventions.
- Accessible (A): If the main entrance is accessible by a ramp or staircases but needs minor interventions and signage.
- Fully Accessible (FA): If the main entrance meets all the standards as per the audit questionnaire.

## Reception

- Not Available (-): If the reception is not available.
- Not Accessible (NA): If the reception is not accessible to all user groups.
- Partially Accessible (PA): If the reception desk is accessible but needs signage and has congested circulation area.
- Accessible (A): If the reception desk is accessible to the users with proper circulation space but requires minor interventions.
- Fully Accessible (FA): If the reception meets all the standards as per the audit questionnaire.

## Door

- Not Available (-): -
- Not Accessible (NA): If the door is not accessible (not up to standard).
- Partially Accessible (PA): If the door width is accessible but equipped hardware is not accessible and is not easily operable.
- Accessible (A): If the door is accessible with equipped hardware and is easily operable.
- Fully Accessible (FA): If the door meets all the standards as per the audit questionnaire.

## Corridor

- Not Available (-): -
- Not Accessible (NA): If the corridor is not accessible (not up to standard).
- Partially Accessible (PA): If the staircase width is accessible but there are objects blocking the circulation and has no signage.
- Accessible (A): If the corridor is accessible but requires minor interventions.
- Fully Accessible (FA): If the corridor meets all the standards as per the audit questionnaire.

## Lift

- Not Available (-): - If the lift service is not available.
- Not Accessible (NA): If the lift is not accessible (not up to standard).
- Partially Accessible (PA): If the lift door width is accessible with interior space but control buttons are not accessible and lacks proper signage and handrails.
- Accessible (A): If the lift door width is accessible with interior space and accessible buttons with braille and handrails.
- Fully Accessible (FA): If the lift meets all the standards as per the audit questionnaire.

## Drinking Water Facilities

- Not Available (-): - If the drinking water services are not available.
- Not Accessible (NA): If the drinking water services are not accessible.
- Partially Accessible (PA): If the drinking water stand height is accessible but circulation space is not enough.
- Accessible (A): If the drinking water services are accessible with proper circulation space
- Fully accessible (FA): If the drinking water facilities meet all the standards as per the audit questionnaire.

## Sanitary Facilities

- Not Available (-): - If the sanitary facilities are not available.
- Not Accessible (NA): If the sanitary facilities are not accessible (have steps or no wheelchair circulation space), or the facility is a pan.
- Partially Accessible (PA): If the sanitary facilities services are accessible and the facility is a commode, but handrails are required.
- Accessible (A): If the sanitary facilities services are accessible and the facility is a commode with standard handrails and accessible lavatories.
- Fully Accessible (FA): If the sanitary water facilities meet all the standards as per the audit questionnaire.

## Signage

- Not Available (-): - If the signage is not available.
- Not Accessible (NA): If the signage is not accessible or visible.
- Partially Accessible (PA): If the signage is visible but requires more information and proper placement.
- Accessible (A): If the audio/visual signage is visible with strategic placement and color contrast.
- Fully Accessible (FA): If the signage meets all the standards as per the audit questionnaire.

## Emergency Exit

- Not Available (-): - If the emergency exit is not available.
- Not Accessible (NA): If the emergency exits are not accessible.
- Partially Accessible (PA): If the emergency exits are not visible.
- Accessible (A): If the emergency exits are accessible.
- Fully Accessible (FA): If emergency exit meets all the standards as per the audit questionnaire.

# 2 | METHODS

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## 2.1. Preparation of Checklist

Initially, NFDN in technical collaboration with Square Unit, developed the checklist based upon the Principles of Universal Design and approved national standards and guidelines for accessibility. Building upon the manual, we have also incorporated various international standards applied by developed countries. Additionally, standards mentioned in ADA were taken as a reference for preparation of questions. The checklist compares and analyzes the different components of the buildings like the approach for the building, vertical and horizontal circulations, facilities and services, interior design and evacuation facilities during emergencies.

This Accessibility Audit Checklist has been designed for the use of accessibility auditors undertaking access audit of public infrastructures and other services. However, the checklist may be used as a basic tool and may be further developed and innovated by the auditor depending on the situations and types of buildings or services to be audited. The purpose of this tool is to get uniformity in accessibility audit in all places of the country and ensure minimum standards in the recommendations provided in accessibility audit reports.

The questionnaire was finalized after various consultations and discussions among the members of resource pool, technical persons of KMC, accessibility advisor of CBM, DPOs representatives, university lecturers/professors and other concerned personnel working on accessibility and universal design.

## 2.2. Testing the Checklist

The checklist was tested in the field in 25 different samples and further improved based on the findings of the test. Besides the technical team, the user group comprising of 5-6 persons with different forms of disabilities I.E. persons with visual, hearing and physical disabilities, parents of persons with intellectual disabilities including both male and female also actively participated in the audit process. They used to provide feedbacks and recommendations based on the features found during the audit process. An architect shared benefits of participating the user groups in the process as follows:



**It was really helpful to enhance our knowledge on accessibility by getting feedback from the real users, since we got the opportunity to have the exposure of people from diverse needs and abilities. It not only contributed to derive accurate data but also proved fruitful in feeding to the checklist and audit procedures as well."**

## 2.3. Sampling

For the selection of the 150 samples in the valley, NFDN conducted consultation meetings among representatives of various Disabled People's Organizations (DPOs) and other relevant stakeholders in the respective three districts. The participants from such consultation meetings recommended various places from their respective districts with their own needs and experiences. The team also took some inputs from some key persons of KMC, the NFDN's working committee members, staffs team, CBM team, strategic partners (DPOs specially working in the areas of accessibility and universal design), resource pool members and eventually finalized the samples for access audit. The auditors were then deployed to the respective fields.

Public buildings and spaces that were selected for the audit have been classified into 10 broader sectors:

1. **Public Service Establishments:** Offices (Government, Non-Government, Ministries and others.
2. **Health Sector:** Hospitals, Health Posts and Health Centers.
3. **Transportation Sector:** Lane (Roads), Airports, Bus Stops/Parks.
4. **Financial and Corporate Sector:** Mall, Bank, ATM machine, Corporation, Insurance.
5. **Educational Sector:** School, College, Library, Training/ Research Centers.
6. **Recreation and Entertainment Sector:** Theaters, Community Spaces, Parks, Museum.
7. **Hotels, Resorts and Restaurants**
8. **Public Toilet and WASH Facilities.**
9. **Sports and Fitness.**
10. **Religious Places:** Temple, Community Halls, Meditation Centers and others.

## 2.4. Site Audit

14 individuals consisting of male and female were mobilized for the site audit including six professional architects, two professional civil engineers and six voluntary members. Prior to the audit and site visits, a small orientation program was held to orient them on the objectives and procedures of site audit. Training topics included description of study objectives, short presentations role-play and field practices. Before the site audit, all the proposed sites were plotted and conventional planning was done for effective operation of audit. For effective audit, different equipment like lasers, slope calculating equipment and force calculating machines authorized by ADA were used. Before beginning the proper audit process, a formal written permission with the owner of the buildings, government authorities or relevant committee was taken.

Three teams were mobilized for the field visit; each team comprised of at least two professional architects and one volunteer for audit and data collection. Data was collected through close observations, getting recommendations/feedbacks of diverse users, measurement of different spaces and general interviews. To get a true reflection of how the physical infrastructures and services work, the audit of those structures and services was undertaken when they were fully operational. The observation and measurement focused on how the structures and services work in several ways including:

- Observation of how customers/staff use the structures
- Analysis of the physical design of the premises
- Consultation with users.

The audit compared and analyzed the following spaces and components:

- Approach of the building (reaching the infrastructure, parking, drop-off, entrance)
- Vertical and horizontal circulation
- Facilities and services
- Interior Design and access
- Evacuation and emergencies
- Proper direction and appropriate information

In order to ensure the thoroughness of the data collection work, necessary photographs and sketches were also made of different spaces and components of the buildings. Close observations and measurements were carried out on the sites to produce accurate results.

## 2.5. Report Preparation

All the filled-up questionnaires were manually edited, coded, and entered into computer by trained data entry personnel. Data was entered/processed using Microsoft Word and Microsoft Excel. Data was entered based on responses from the questionnaires. Various quality check mechanisms were adopted to minimize potential data entry errors.

As ensuring accessibility to buildings and facilities is a new practice in Nepal, priority was given to accessibility of main entrance of the buildings such as standard ramps, standard steps and handrails in ramps and steps, audio/visual signage's and tactile. Horizontal and vertical circulation, facilities and services within the buildings such as bathrooms, drinking water, corridors and emergency exits were also given priority during the audit.

# 3 | LITERATURE REVIEW

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## 3.1. Universal Design

Universal Design is the design and composition of an environment, system, facilities and products so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability. An environment (or any building, product, or service in that environment) should be designed to meet the needs of all people who wish to use it. It is a fundamental condition of good design.<sup>3</sup>

### Principles of Universal Design

The Principles of Universal Design are:

- **Equitable use**
- **Flexibility in use**
- **Simple and intuitive**
- **Perceptible information**
- **Tolerance for error**
- **Low physical effort**
- **Size and space for approach and use**

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3 <http://universaldesign.ie/What-is-Universal-Design/>  
(June 02,2018)



## **3.2. Some Legal Provisions and Commitments on Accessibility**

### **3.2.1. International Provisions and Commitments**

#### **3.2.1.1. United Nations Convention on the Rights of Persons with Disability**

The Convention on the Rights of Persons with Disabilities is an international human rights treaty of the United Nations intended to protect the rights and dignity of persons with disabilities. Parties to the Convention are required to promote, protect, and ensure the full enjoyment of human rights by persons with disabilities and ensure that they enjoy full equality under the law. This convention has accepted “accessibility” as one of its important guiding principles in article 3, since accessibility is the essential prerequisites for all people with all forms of disabilities to protect, promote and ensure their all rights enshrined in the whole convention. It has dedicated its article 9 to describe the obligations of the state parties to ensure all built environment, transport system and communication services are accessible for persons with disabilities that are open for public. Each parties is obliged to take the effective measures to ensure all the physical infrastructures and other services are following the minimum accessibility standards and principles of Universal Design.

As it is the precondition for realizing all other rights, article 19 clearly demonstrates *“persons with disabilities have access to a range of in-home, residential and other community support services, including personal assistance necessary to support living and inclusion in the community, and to prevent isolation or segregation from the community”*. Article 21 further reflects *state Parties shall take all appropriate measures to ensure that persons with disabilities can exercise the right to freedom of expression and opinion, including the freedom to seek, receive and impart information and ideas on an equal basis with others and through all forms of communication of their choice, as defined in article 2 of the present Convention .... Similarly, article 24 recognizes the braille, sign language and other alternative formats including reasonable accommodations of individual's requirements For the promotion of inclusive education for persons with disabilities.*

#### **3.2.1.2. Incheon Strategy**

To celebrate the Asia and Pacific decade of 2013-22, the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) envisioned the Incheon Strategy in 2012 for effective execution of CRPD in the region with the slogan: “Make the rights real”. The Incheon Strategy provides the Asia and Pacific region, and the world, with the first set of regionally agreed disability-inclusive development goals, which works towards building an Inclusive, Barrier-free and Rights-based Society for Persons with Disabilities in Asia and the Pacific. Goal 3 of this document directly emphasizes in enhancing disabled person’s access to physical environment, public transportation, knowledge, information and communication. The goal recognises,

access audits are an important means of ensuring accessibility and must cover all stages of the process of planning, design, construction, maintenance and monitoring and evaluation. To achieve this goal, the following three targets are set up:

- Target 3.A :** Increase accessibility of the physical environment open to public, in the national capital.
- Target 3.B :** Enhance accessibility and usability of public transportation.
- Target 3.C :** Enhance accessibility and usability of information and communications services.
- Target 3.D :** Halve the proportion of persons with disabilities who need but do not have appropriate assistive devices or products/ indicators for tracking progress.

### 3.2.1.3. Sustainable Development Goals (SDG)

The Sustainable Development Goals (SDGs), also known as the Global Goals, are targeted to end poverty, protect our planet and ensure that all people enjoy peace and prosperity. They provide clear guidelines and targets for all countries to adopt in accordance with their own priorities. The SDGs are an inclusive agenda so as they follow the slogan: "Leave No one Behind".<sup>4</sup>

"Sustainable development goal is a milestone to thrive the persons with disabilities in forms of development process. There are 17 goals among these 13 goals are reference to the person with disabilities and 7 have explicit reference to Person with disabilities" (Wagle, 2017).<sup>5</sup>

The sustainable development goal 11 aims to make cities and human settlements inclusive, safe, resilient and sustainable. Some of the targets of goal 11 that addresses accessibility are as follows:

- By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
- By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.
- By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.

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4 <http://www.undp.org/content/undp/en/home/sustainable-development-goals.html>(June 22,2018)

5 Prakash Wagle,The Sustainable Development Goals: An opportunity for the persons with disabilities:  
<https://www.nfdn.org.np/papers/sdg-opportunity-for-pwds.html>, November, 2018.

- By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.

### 3.2.1.4. New Urban Agendas

The New Urban Agenda represents a shared vision for a better and more sustainable future – one in which all people have equal rights and access to the benefits and opportunities that cities can offer, and in which the international community reconsiders the urban systems and physical form of our urban spaces to achieve this. The implementation of the New Urban Agenda contributes to the implementation and localization of the 2030 Agenda for Sustainable Development in an integrated manner. The vision is to develop cities for all, with equal access to resources in cities and other human settlements, to promote inclusivity and ensure that all inhabitants, of present and future generations, without discrimination, are able to inhabit and produce just, safe, healthy, accessible, affordable, resilient and sustainable cities and human settlements to foster prosperity and life of quality.<sup>6</sup>

The disability has been referenced for 15 times in The New Urban Agenda and the persons with disabilities have been recognized one of the most vulnerable group as well as an important stakeholder amongst others. In order to achieve the vision, the New Urban Agenda is guided by the following principles:

- Leave no one behind, by ending poverty in all its forms and dimensions, including the eradication of extreme poverty, by ensuring equal rights and opportunities, socioeconomic and cultural diversity, and integration in the urban space, by enhancing livability, education, food security and nutrition, health and well-being, including ending the epidemics of AIDS, tuberculosis and malaria, by promoting safety and eliminating discrimination and all forms of violence, by ensuring public participation providing safe and equal access for all, and by providing equal access for all to physical and social infrastructure and basic services, as well as adequate and affordable housing.
- Ensure sustainable and inclusive urban economies by leveraging the agglomeration benefits of well-planned urbanization, including high productivity, competitiveness and innovation, by promoting full and productive employment and decent work for all, by ensuring the creation of decent jobs and equal access for all to economic and productive resources and opportunities and by preventing land speculation, promoting secure land tenure and managing urban shrinking, where appropriate.

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<sup>6</sup> New Urban Agenda: <http://habitat3.org/wp-content/uploads/New-Urban-Agenda-GA-Adopted-68th-Plenary-N1646655-E.pdf>, page 3 and 5.

### **3.2.1.5. The Sendai Framework for Disaster Risk Reduction 2015-2030:**

The Sendai Framework was adopted at the Third UN World Conference in Sendai, Japan, on March 18, 2015. In the framework, persons with disabilities are addressed either directly or indirectly as part of the preamble, the guiding principles, the priorities for action, and the role of stakeholders. In addition, the 2015 World Conference on Disaster Risk Reduction incorporated explicit recommendations toward an accessible and inclusive environment not found in previous disaster risk reduction conferences. The disability-related terms and concepts such as accessibility, inclusion, and universal design throughout the SFDRR document was significant. These concepts, which have their origin in disability studies, are used in the SFDRR document to refer to the needs of all in disaster, not only to people with disabilities. These disability-related concepts will now serve the field of disaster risk reduction as important overarching disaster-related principles" (Laura M. Stough, 2015)<sup>7</sup>.

### **3.2.2. National provisions**

The Disabled Protection and Welfare Act (DPWA - 1982) was the first ever legislation formulated that addressed the rights of Nepalese citizens with disability. The rule to materialize it was however only formulated 12 years later, in 1994. Through DPWA the government expressed interest to grant many rights and privileges to persons with disabilities, however, disability rights activists and other concerned stakeholders have persistently asserted that the act was solely provisionary and optional rather than practical and binding. Consequently, Persons with disabilities have yet to enjoy these provisions. As a major policy milestone, government also adopted The Special Education Policy 2053 (1996), National Policy and Plan of Action 2063-72 (2006-15) among others.

The definition and classification of disability has evolved through different stages of conceptual development. The definitions also vary, as disability can differ depending upon time, place, nature and its severity. The Government of Nepal broadened the definition of disability going beyond what the Disabled Protection and Welfare Act (DPWA) and Ministry of Women, Children and Social Welfare (MOWCSW) in 2006 defined disability as. According to the Government of Nepal, as defined in the Disability Rights Act 2017, disability is "the condition of difficulty in carrying out daily activities normally and in taking part in social life due to problems in parts of the body and the physical system as well as obstacles created by physical, social, cultural environment and by communication".

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7 Laura M. Stough: The Sendai Framework for Disaster Risk Reduction and Persons with Disabilities, June 2015, Retrieved from <https://link.springer.com/article/10.1007/s13753-015-0051-8>, December, 2018.

The government further classified disability on the basis of nature and severity into the following ten categories:

- **Physical Disability**
- **Disability related to vision**
- **Disability related to hearing**
- **Deaf- Blind**
- **Disability related to voice and speech**
- **Mental/psychosocial Disability**
- **Intellectual disability**
- **Autism**
- **Hemophilia**
- **Multiple disability**

### **3.2.2.1. Act Related to the Rights of Persons with Disabilities, 2074 (2017)**

The legislative parliament passed the Disability Rights Bill, on 6th August 2017. The purpose behind the formulation of this act was amendment of Disabled Protection and Welfare act 1982, stepping ahead for the domestication of UNCRPD and incorporating the disability related provision ensured by the constitution of Nepal 2015. This act aims to contribute to the implementation of UNCRPD and disability related constitutional provisions to uplift life of Nepalese persons with disabilities and provide Persons with disabilities with access to basic services, human rights, and opportunities including health, education and employment. Though the particular article is not dedicated for accessibility, the act has, in many provisions, committed to promote the approved accessibility standards and universal design principles in every built environment, transportation system and communication services that are open for public.

### **3.2.2.2. Accessible Physical Infrastructure and Communication Services for People with Disability, 2069 B.S (2013 AD)**

The Government of Nepal adopted a 'Directive for Accessible Physical Structure and Communication Service for People with Disabilities' in 17th February 2013 with the aim to remove the barriers for Persons with disabilities and increase their access to the public physical infrastructures, facilities and information and communication service. The directive, a first ever of its kind has guidelines and minimum standards, with technical specifications for constructing buildings, road lanes, public spaces, transport services and associated facilities considering the need of the Persons with disabilities. The guidelines act as standards and codes for all those directly/indirectly concerned with the construction, development and preparation of public structures and communication services.

### **3.2.2.3. Inclusive Education Policy for Persons with Disabilities 2072 (2016)**

The Government of Nepal replaced the 'Special education policy' of 1996 with the 'Inclusive Education Policy for Persons with Disabilities in 2016 with amendments in the previous policy and strategies in line with the recent national and international frameworks i.e. CRPD, Constitution of Nepal 2015 and others. The 'Inclusive education policy, 2016' accepted the need of accessible environment at school/college premises including every facilities within the premises that meets the approved standards. The policy also emphasized on the need to follow the accessible formats of teaching learning methods; examination and evaluation system, maximum use of information communication technologies among others.

# 4 | FINDINGS

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The findings and results of this accessibility audit carried out in 150 sample locations have been presented in the following three contexts:

## **Situation of Individual Sector**

The findings have shown the current status of spaces and components of individual sectors within Kathmandu valley. It identifies the problems of each individual sector and help prioritize sectors that need to improve the provision of facilities for Persons with disabilities.

## **Situation of Districts**

The findings have shown district-wise scenario of accessibility status. The districts include Kathmandu, Bhaktapur and Lalitpur. The data presented has included the total number of buildings and communal spaces in each district that have followed the guidelines for providing necessary facilities for people with disabilities.

## **Overall Situation of Kathmandu Valley**

The findings have shown the overall scenario of accessibility status of Kathmandu valley. It has included the necessary information regarding the total number of buildings and communal spaces that have followed the guidelines for providing necessary facilities for people with disabilities.



## 4.1. Situation of Individual Sectors

The structures/spaces studied belong to the following 10 sectors:

- A. Public Service Establishments
- B. Health Sector
- C. Transportation Sector
- D. Financial and Corporate Sector
- E. Educational Sector
- F. Recreation and Entertainment Sector
- G. Hotels, Resorts and Restaurants
- H. Public Toilet and WASH facilities
- I. Sports and Fitness
- J. Religious Places

### 4.1.1. Public Service establishments

The public sector is the part of the economy concerned with providing various governmental services which includes services as infrastructure offices, ministries, public transits and those working for the government itself.

The status of spaces and components of public service sector is given below:

**Table 1 Public Service Sector**

S.N	Description	Not Available (-)		Not Accessible (NA)		Partially Accessible (PA)		Accessible (A)		Fully Accessible (FA)	
	External services and benefits	No.	%	No.	%	No.	%	No.	%	No.	%
1	Reaching the infrastructure	0		2		25		0		0	
2	Parking	19		3		5		0		0	
3	Paths around infrastructure	1		4		22		0		0	
4	Ramps/curb ramps	13		7		7		0		0	
5	Staircase	8		4		14		1		0	
6	Main entrance	1		7		17		2		0	
Internal services and benefits											
7	Reception	3		14		10		0		0	
8	Door	1		8		17		1		0	
9	Corridors	1		7		18		1		0	
10	Staircase	7		5		15		0		0	
11	Ramps	26		1		0		0		0	
12	Lift	24		2		0		1		0	
13	Drinking water	20		3		4		0		0	
14	Services	4		15		7		1		0	



15	Sanitary facilities	1		23		3		0		0	
16	Signage	20		6		1		0		0	
17	Emergency exit	23		2		2		0		0	
	Remarks			25		2		0		0	

A total of 27 samples were audited within this sector. The findings are shown in pie charts and bar graphs below;

### Accessibility Status of Public Service Sector Within Kathmandu Valley

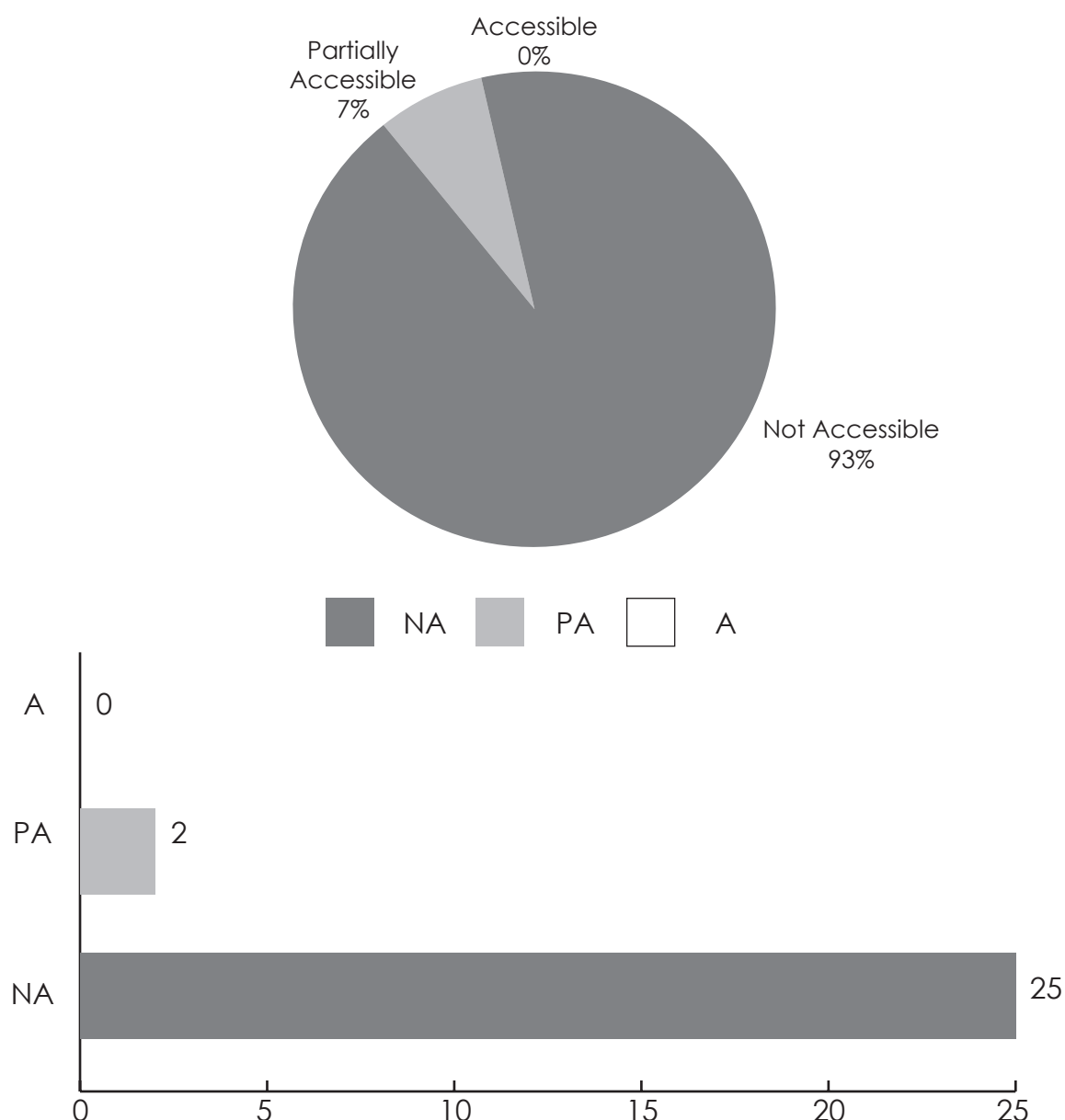


Figure1. Accessibility status of public service sector within Kathmandu valley

None of the samples out of total 27 taken from public service sectors within Kathmandu valley were found 'Accessible'. 25 were found 'Not Accessible' and 2 were found 'Partially Accessible'.

## 4.1.2. Health Sector

This sector includes different hospitals, health posts and research centres.

**Table 2 Health Sector**

S.N	Description	Not Available (-)		Not Accessible (NA)		Partially Accessible (PA)		Accessible (A)		Fully Accessible (FA)	
	External services and benefits	No.	%	No.	%	No.	%	No.	%	No.	%
1	Reaching the infrastructure	0		2		15		0		0	
2	Parking	5		0		12		0		0	
3	Paths around infrastructure	0		3		13		1		0	
4	Ramps/curb ramps	7		1		7		2		0	
5	Staircase	5		3		8		1		0	
6	Main entrance	0		6		9		2		0	
Internal services and benefits											
7	Reception	4		7		6		0		0	
8	Door										
9	Corridors	2		3		11		1		0	
10	Staircase	4		4		7		1		0	
11	Ramps	16		0		0		1		0	
12	Lift	12		2		3		2		0	
13	Drinking water	17		0		0		0		0	
14	Services	1		8		8		0		0	
15	Sanitary facilities	6		6		2		0		0	
16	Signage	6		9		2		0		0	
17	Emergency exit	16		1		0		0		0	
	Remarks			16		1		0		0	

A total of 17 samples were audited within this sector. The findings are shown in pie charts and bar graphs on the next page:

## Accessibility Status of Health Sector Within Kathmandu Valley

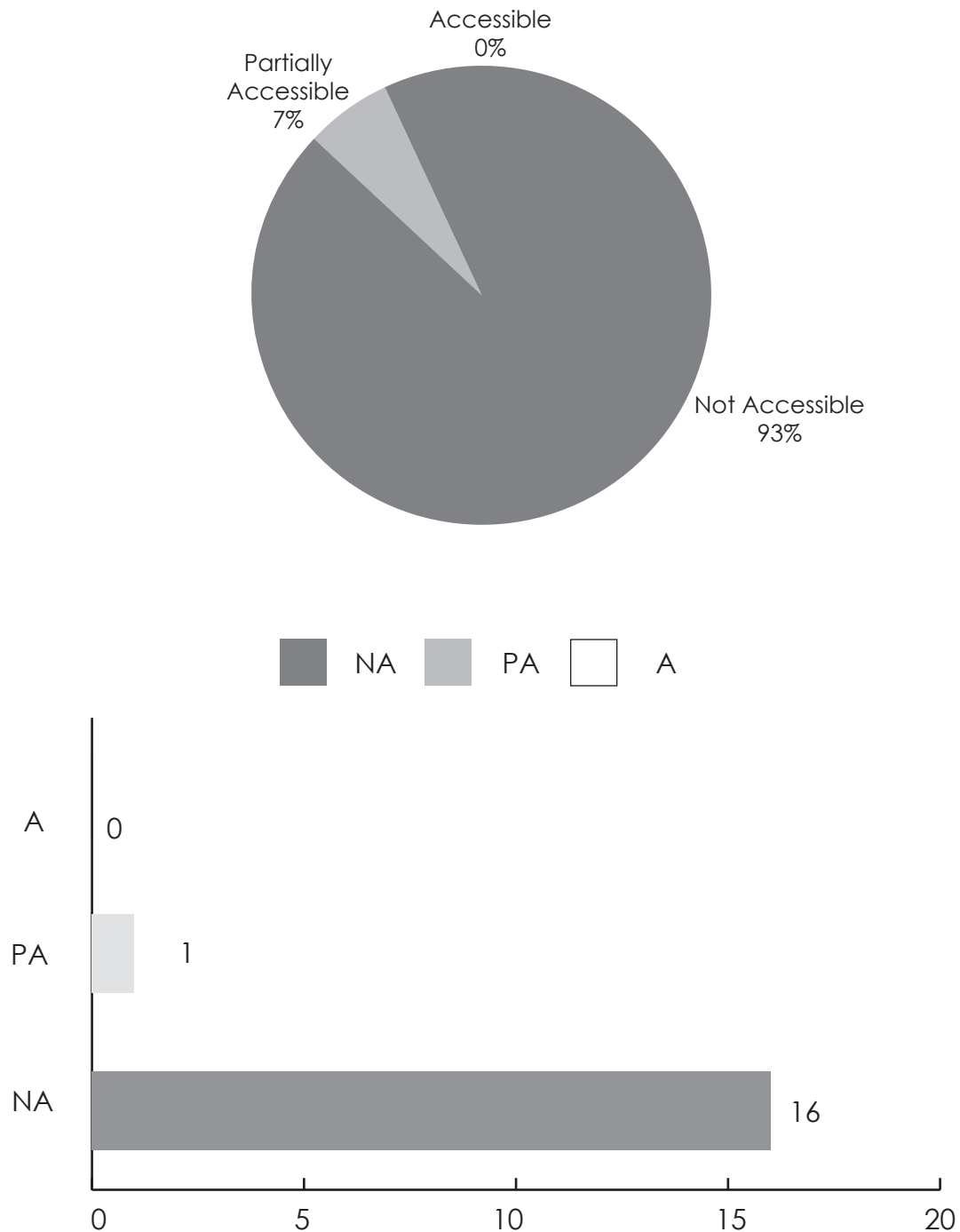


Figure 2. Accessibility status in health sector within Kathmandu valley

None of the samples out of the total 17 taken from health sectors in Kathmandu valley were found 'Accessible'. 16 were found 'Not Accessible' and one was found 'Partially Accessible'.

### 4.1.3. Educational Sector

This sector includes different schools, colleges, libraries and research centers.

**Table 3 Educational Sector**

S.N	Description	Not Available (-)		Not Accessible (NA)		Partially Accessible (PA)		Accessible (A)		Fully Accessible (FA)	
	External services and benefits	No.	%	No.	%	No.	%	No.	%	No.	%
1	Reaching the infrastructure	0		2		20		0		0	
2	Parking	7		5		10		0		0	
3	Paths around infrastructure	0		11		10		1		0	
4	Ramps/curb ramps	9		6		5		2		0	
5	Staircase	8		10		4		0		0	
6	Main entrance	0		10		12		0		0	
Internal services and benefits											
7	Reception	12		7		3		0		0	
8	Door	0		8		12		2		0	
9	Corridors	1		4		12		5		0	
10	Staircase	3		7		10		1		0	
11	Ramps	20		0		2		0		0	
12	Lift	21		1		0		0		0	
13	Drinking water	11		5		1		0		0	
14	Services	1		12		9		0		0	
15	Sanitary facilities	0		17		5		0		0	
16	Signage	11		10		1		0		0	
17	Emergency exit	18		4		0		0		0	
	Remarks			17		5		0		0	

A total of 22 samples were audited within this sector. The findings are shown in pie charts and bar graphs on the next page:

## Accessibility Status of Educational Sector Within Kathmandu Valley

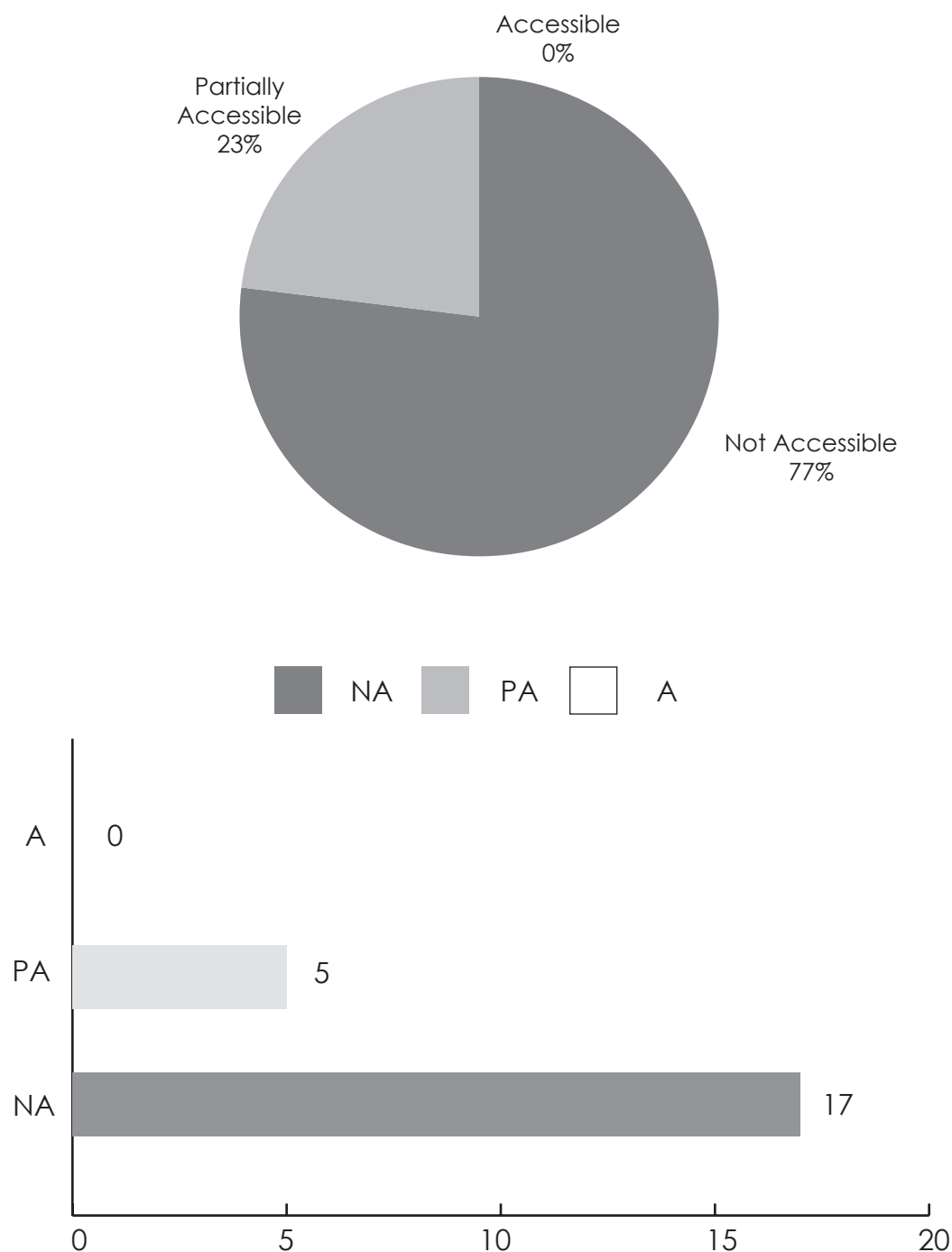


Figure 3. Accessibility status of educational sector within Kathmandu Valley

None of the samples out of the total 22 taken from educational sectors in Kathmandu valley were found 'Accessible'. 17 were found 'Not Accessible' and 5 were found 'Partially Accessible'.

#### 4.1.4. Financial and Corporate Sector

The financial sector includes firms working in the stocks sector, providing financial services to commercial and retail customers. This includes banks, investment funds, insurance companies and real estate.

**Table 4 Financial and Corporate Sector**

S.N	Description	Not Available (-)		Not Accessible (NA)		Partially Accessible (PA)		Accessible (A)		Fully Accessible (FA)	
	External services and benefits	No.	%	No.	%	No.	%	No.	%	No.	%
1	Reaching the infrastructure	0		0		8		1		0	
2	Parking	1		1		7		0		0	
3	Paths around infrastructure	1		2		6		0		0	
4	Ramps/curb ramps	5		1		3		0		0	
5	Staircase	2		1		4		2		0	
6	Main entrance	0		4		4		1		0	
Internal services and benefits											
7	Reception	5		2		2		0		0	
8	Door	2		1		5		1		0	
9	Corridors	0		0		5		4		0	
10	Staircase	0		1		4		4		0	
11	Ramps	9		0		0		0		0	
12	Lift	3		1		5		0		0	
13	Drinking water	8		0		0		1		0	
14	Services	2		2		5		0		0	
15	Sanitary facilities	0		7		2		0		0	
16	Signage	5		1		3		0		0	
17	Emergency exit	7		2		0		0		0	
	Remarks			6		3		0		0	

A total of 9 samples were audited within this sector. The findings are shown in pie charts and bar graphs on the next page:

## Accessibility Status of Finance Sector Within Kathmandu Valley

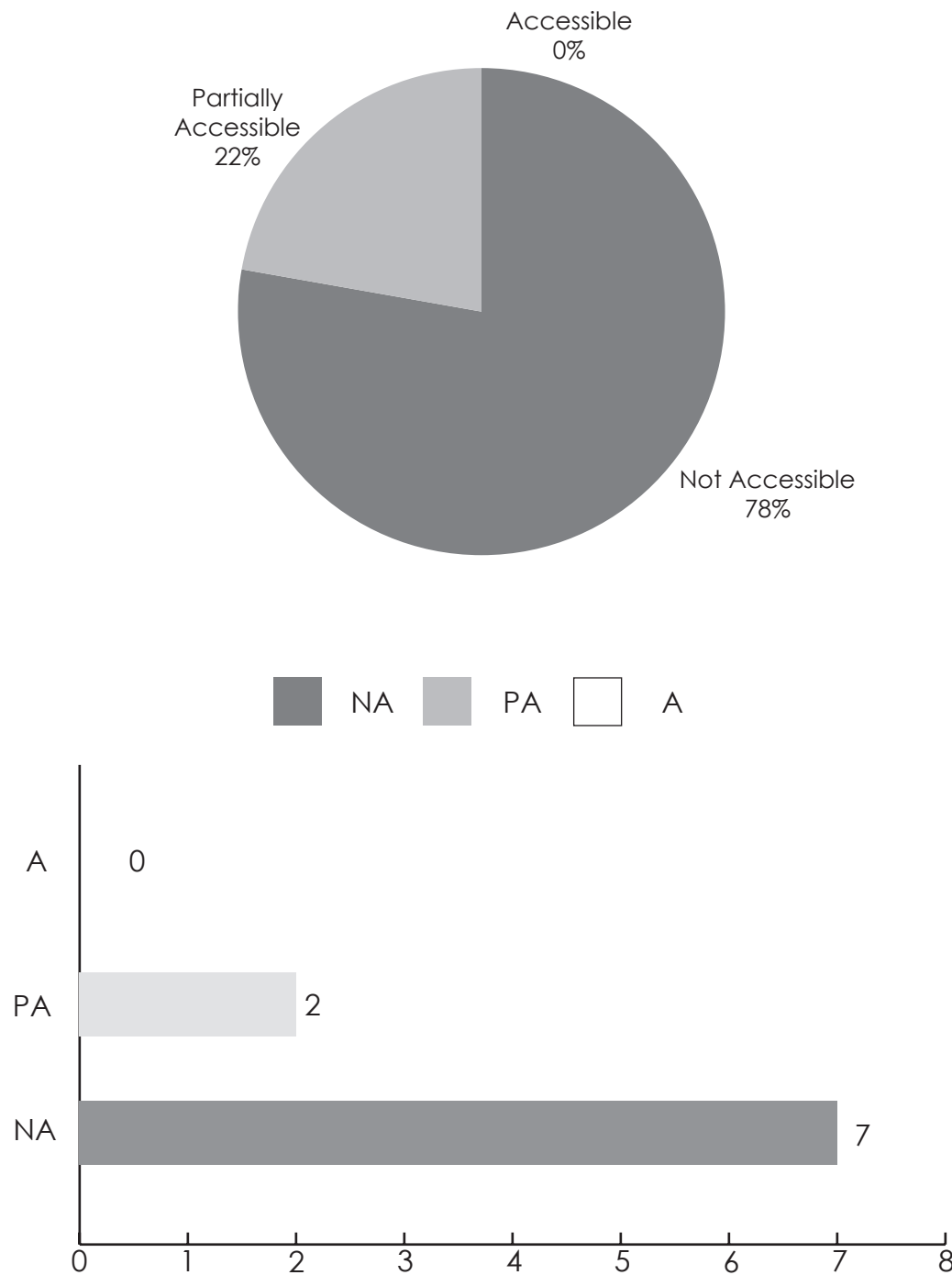


Figure 4. Accessibility status of finance sector within Kathmandu Valley

None of the samples out of the total 9 taken from finance sector in Kathmandu valley were found 'Accessible'. 7 samples were found 'Not Accessible' and 2 were found 'Partially Accessible'.

## 4.1.5. Recreation and Entertainment sector

Any activity of leisure, leisure being discretionary time, carried out for enjoyment, amusement, or pleasure and is considered as recreation.

This sector includes different parks, banquets, sports complexes, museums, exhibitions and performance halls among others.

**Table 5 Recreation and Entertainment sector**

S.N	Description	Not Available (-)		Not Accessible (NA)		Partially Accessible (PA)		Accessible (A)		Fully Accessible (FA)	
	External services and benefits	No.	%	No.	%	No.	%	No.	%	No.	%
1	Reaching the infrastructure	0		4		11		0		0	
2	Parking	3		3		9		0		0	
3	Paths around infrastructure	0		7		7		1		0	
4	Ramps/curb ramps	8		3		4		0		0	
5	Staircase	8		2		5		0		0	
6	Main entrance	0		7		6		2		0	
Internal services and benefits											
7	Reception	4		9		2		0		0	
8	Door	7		5		3		0		0	
9	Corridors	3		3		8		1		0	
10	Staircase	7		6		2		0		0	
11	Ramps	12		1		2		0		0	
12	Lift	15		0		0		0		0	
13	Drinking water	9		4		2		0		0	
14	Services	8		5		2		0		0	
15	Sanitary facilities	2		13		2		0		0	
16	Signage	5		6		4		0		0	
17	Emergency exit	14		1		0		0		0	
	Remarks			13		2		0		0	

A total of 15 samples were audited within this sector. The findings are shown in pie charts and bar graphs on the next page:



## Accessibility Status of Recreational Sector Within Kathmandu Valley

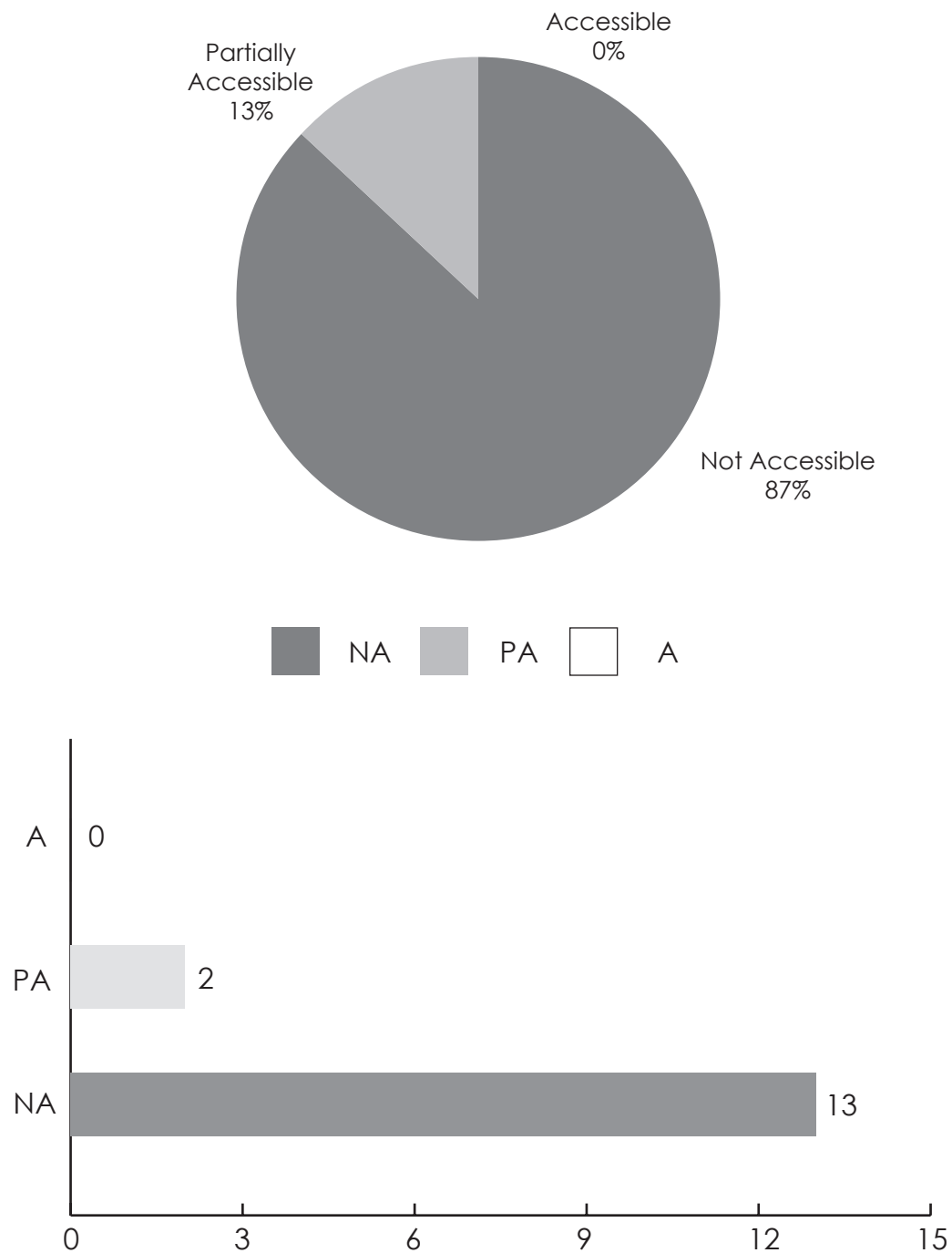


Figure 5. Accessibility status of recreational sector within Kathmandu Valley

None of the samples out of the total 15 taken from recreational sector in Kathmandu valley were found 'Accessible'. 13 were found 'Inaccessible' and 2 were found 'Partially Accessible'.

## 4.1.6. Sports and Fitness sector

This sector includes different sports complexes, stadiums and covered halls.

**Table 6 Sports and Fitness sector**

S.N	Description	Not Available (-)		Not Accessible (NA)		Partially Accessible (PA)		Accessible (A)		Fully Accessible (FA)	
	External services and benefits	No.	%	No.	%	No.	%	No.	%	No.	%
1	Reaching the infrastructure	0		0		9		0		0	
2	Parking	1		1		7		0		0	
3	Paths around infrastructure	0		1		2		0		0	
4	Ramps/curb ramps	5		2		2		0		0	
5	Staircase	1		4		3		1		0	
6	Main entrance	0		3		5		1		0	
Internal services and benefits											
7	Reception	6		3		0		0		0	
8	Door	0		6		3		0		0	
9	Corridors	0		2		4		3		0	
10	Staircase	3		2		4		0		0	
11	Ramps	6		2		1		0		0	
12	Lift	9		0		0		0		0	
13	Drinking water	9		0		0		0		0	
14	Services	1		8		0		0		0	
15	Sanitary facilities	2		7		0		0		0	
16	Signage	5		4		0		0		0	
17	Emergency exit	7		2		0		0		0	
	Remarks			9		0		0		0	

A total of 9 samples were audited within this sector. The findings are shown in pie charts and bar graphs on the next page:

## Accessibility Status of Sports Sector Within Kathmandu Valley

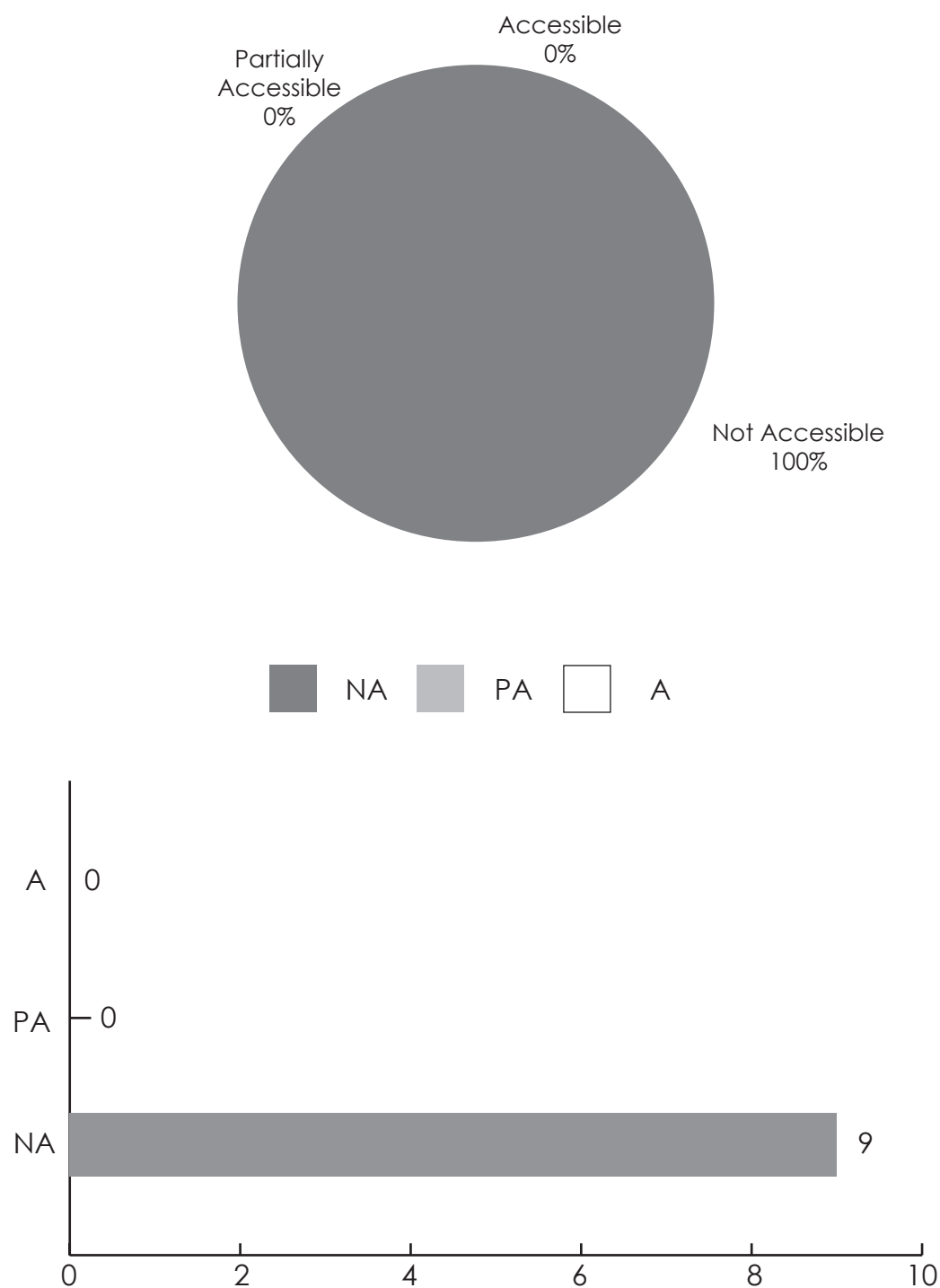


Figure 6. Accessibility status of sports sector within Kathmandu Valley

None of the samples out of the total 9 taken from sports sector were 'Accessible'. 9 out of 9 samples were found 'Not Accessible'.

## 4.1.7. Religious Sector

This sector includes various temples, masjids and other religious places.

**Table 7 Religious Sector**

S.N	Description	Not Available (-)		Not Accessible (NA)		Partially Accessible (PA)		Accessible (A)		Fully Accessible (FA)	
	External services and benefits	No.	%	No.	%	No.	%	No.	%	No.	%
1	Reaching the infrastructure	0		3		10		0		0	
2	Parking	9		0		4		0		0	
3	Paths around infrastructure	0		5		8		0		0	
4	Ramps/curb ramps	10		1		2		0		0	
5	Staircase	4		4		5		0		0	
6	Main entrance	0		9		4		0		0	
Internal services and benefits											
7	Reception	12		1		0		0		0	
8	Door	9		3		1		0		0	
9	Corridors	6		2		5		0		0	
10	Staircase	11		0		2		0		0	
11	Ramps	13		0		0		0		0	
12	Lift	13		0		0		0		0	
13	Drinking water	11		0		2		0		0	
14	Services	7		4		2		0		0	
15	Sanitary facilities	3		10		0		0		0	
16	Signage	10		3		0		0		0	
17	Emergency exit	13		0		0		0		0	
	Remarks			11		2		0		0	

A total of 13 samples were audited within this sector. The findings are shown in pie charts and bar graphs on the next page:

## Accessibility Status of Religious Sector Within Kathmandu Valley

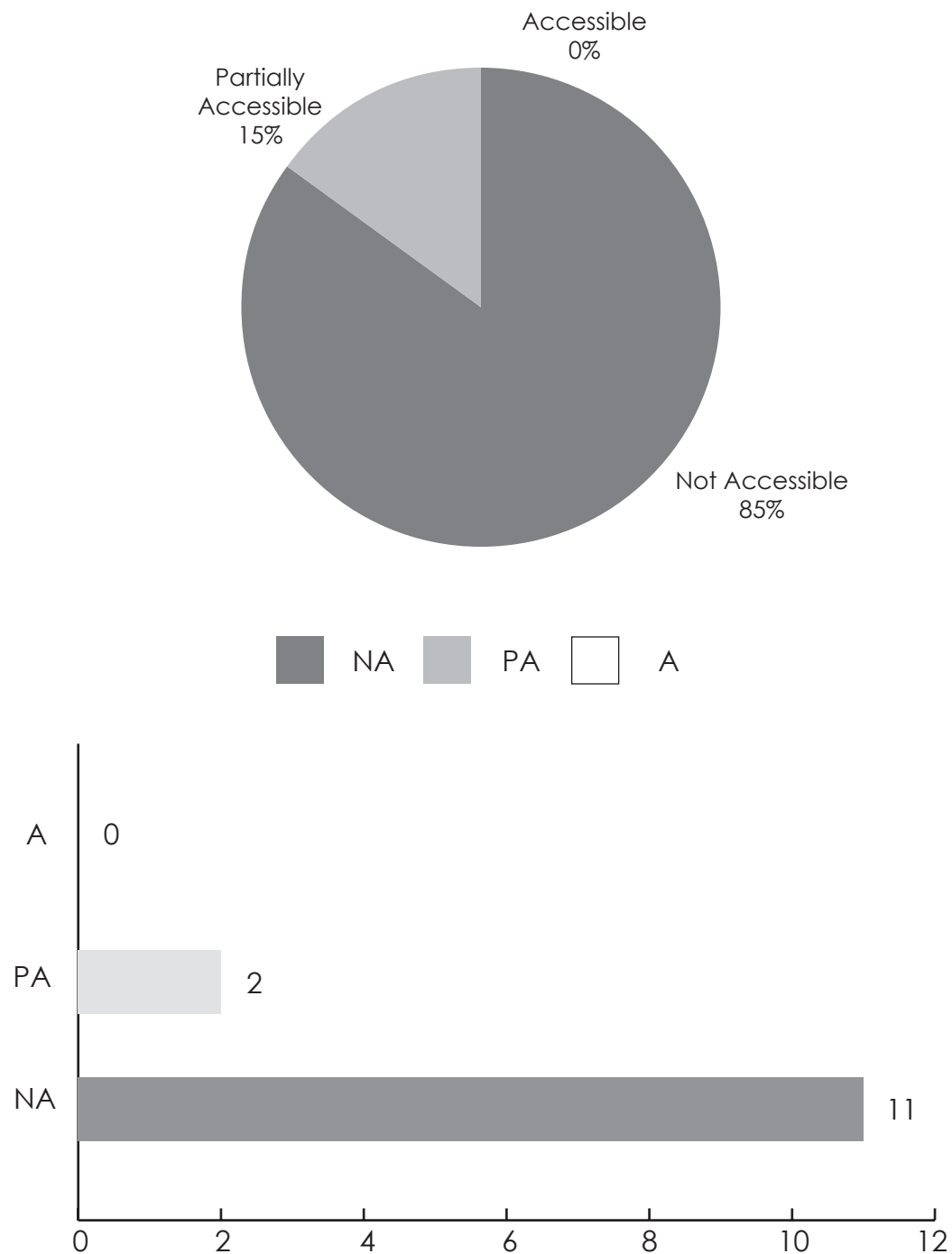


Figure 7. Accessibility status of religious sector within Kathmandu Valley

None of the 13 samples taken from Religious sector within Kathmandu valley were found 'Accessible'. Out of 13 the samples taken, 11 were found 'Not Accessible' and 2 were found 'Partially Accessible'.

## 4.1.8. Hotel, Resorts and Restaurants

This sector includes different hotels resorts and restaurants.

**Table 8 Hotel, Resorts and Restaurants**

S.N	Description	Not Available (-)		Not Accessible (NA)		Partially Accessible (PA)		Accessible (A)		Fully Accessible (FA)	
	External services and benefits	No.	%	No.	%	No.	%	No.	%	No.	%
1	Reaching the infrastructure	0		0		11		0		0	
2	Parking	1		0		10		0		0	
3	Paths around infrastructure	0		10		1		0		0	
4	Ramps/curb ramps	2		1		6		2		0	
5	Staircase	4		7		0		0		0	
6	Main entrance	0		5		8		0		0	
Internal services and benefits											
7	Reception	0		3		7		1		0	
8	Door	0		3		8		0		0	
9	Corridors	0		2		9		0		0	
10	Staircase	1		2		9		0		0	
11	Ramps	8		2		1		0		0	
12	Lift	6		0		4		1		0	
13	Drinking water	11		0		0		0		0	
14	Services	0		4		7		0		0	
15	Sanitary facilities	0		10		1		0		0	
16	Signage	9		0		2		0		0	
17	Emergency exit	10		0		1		0		0	
	Remarks			10		1		0		0	

A total of 11 samples were audited within this sector. The findings are shown in pie charts and bar graphs on the next page:

## Accessibility Status of Hotels And Restaurant Sector Within Kathmandu Valley

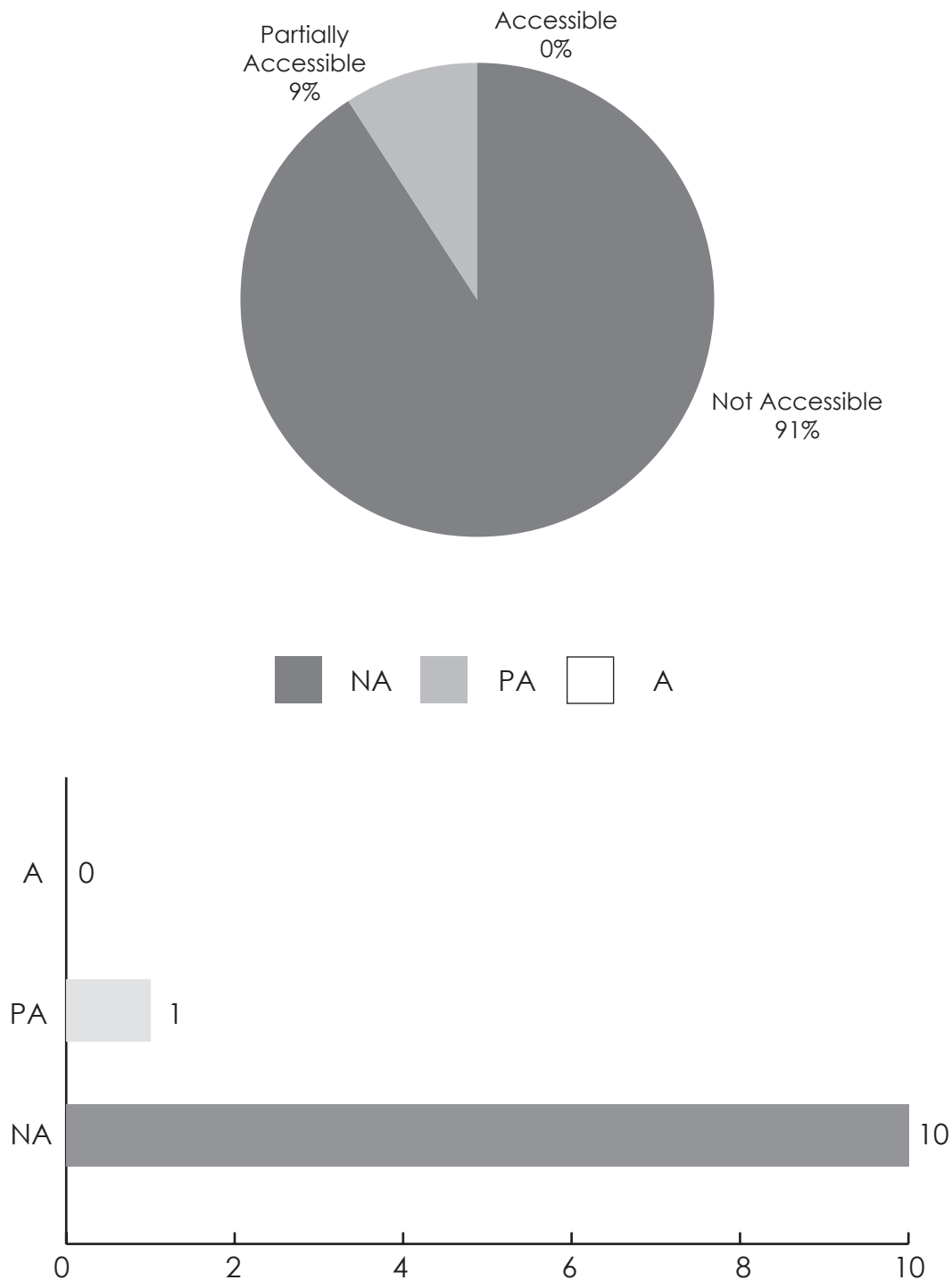


Figure 8. Accessibility status of hotel and restaurant sector within Kathmandu Valley

None of the samples out of 11 taken from hotels and restaurants within Kathmandu valley were found 'Accessible'. 10 were found 'Not Accessible' and 1 was found 'Partially Accessible'.

## 4.1.9. Public Toilet

This sector includes the public toilets within the Kathmandu valley.

**Table 9 Public Toilet**

S.N	Description	Not Available (-)		Not Accessible (NA)		Partially Accessible (PA)		Accessible (A)		Fully Accessible (FA)	
	External services and benefits	No.	%	No.	%	No.	%	No.	%	No.	%
1	Reaching the infrastructure	0		2		12		0		0	
2	Parking	13		1		0		0		0	
3	Paths around infrastructure	0		7		7		0		0	
4	Ramps/curb ramps	9		2		2		1		0	
5	Staircase	6		7		1		0		0	
6	Main entrance	0		9		4		1		0	
Internal services and benefits											
7	Reception	12		2		0		0		0	
8	Door	2		8		3		1		0	
9	Corridors	5		6		3		0		0	
10	Staircase	10		3		1		0		0	
11	Ramps	12		0		2		0		0	
12	Lift	13		1		0		0		0	
13	Drinking water	12		1		1		0		0	
14	Services	7		5		2		0		0	
15	Sanitary facilities	0		11		3		0		0	
16	Signage	6		4		4		0		0	
17	Emergency exit	10		4		0		0		0	
	Remarks			11		3		0		0	

A total of 14 samples were audited within this sector. The findings are shown in pie charts and bar graphs on the next page:



## Accessibility Status of Public Toilet Sector Within Kathmandu Valley

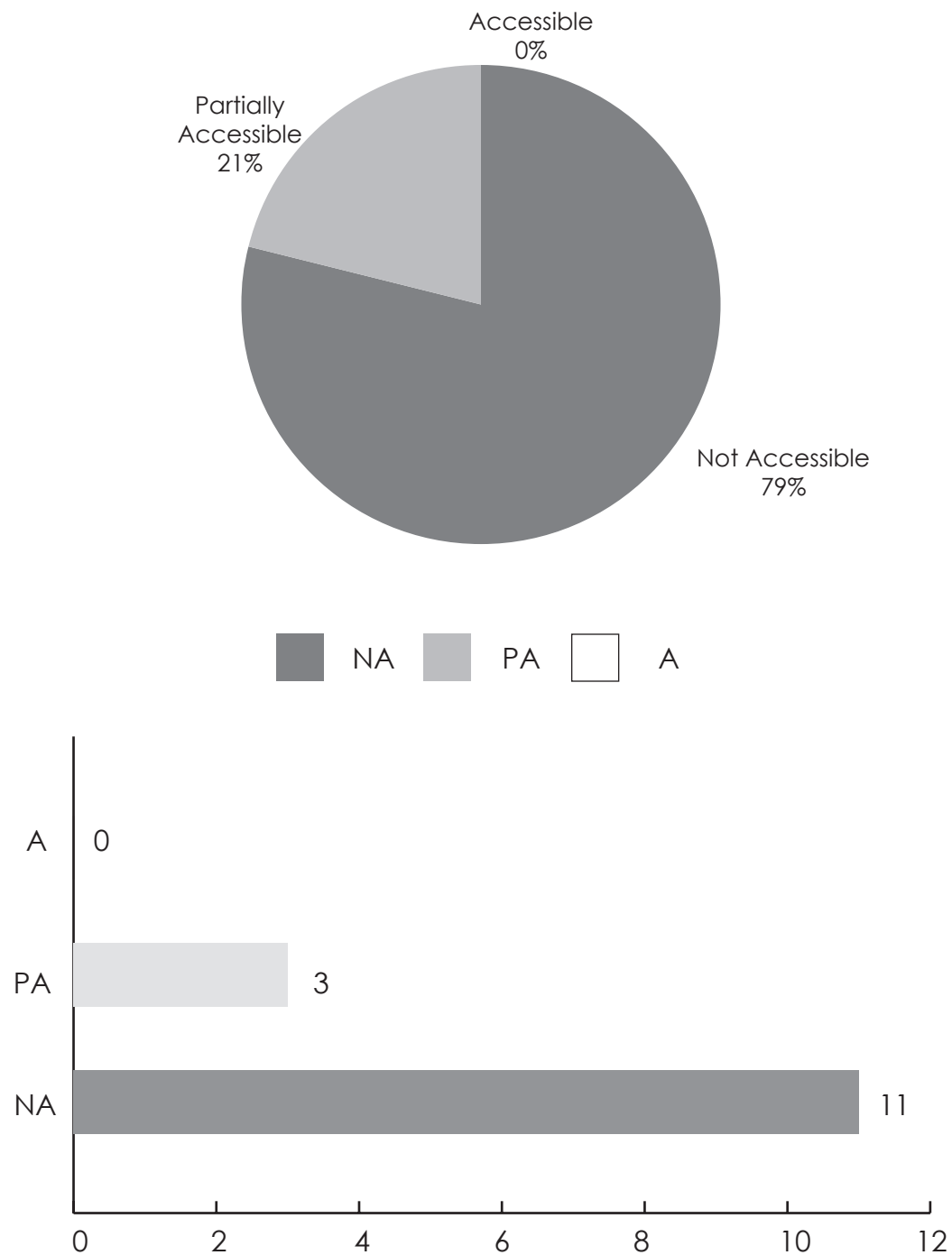


Figure 9. Accessibility status of public toilet sector within Kathmandu Valley

None of the samples out of total 14 taken of public toilets within Kathmandu valley were found 'Accessible'. 11 were found 'Not Accessible' and 3 were found 'Partially Accessible'.

### 4.1.10. Transportation Sector

A total of 13 samples were audited within this sector. The findings are shown in pie charts and bar graphs below.

#### Accessibility Status Of Transportation Sector Within Kathmandu Valley

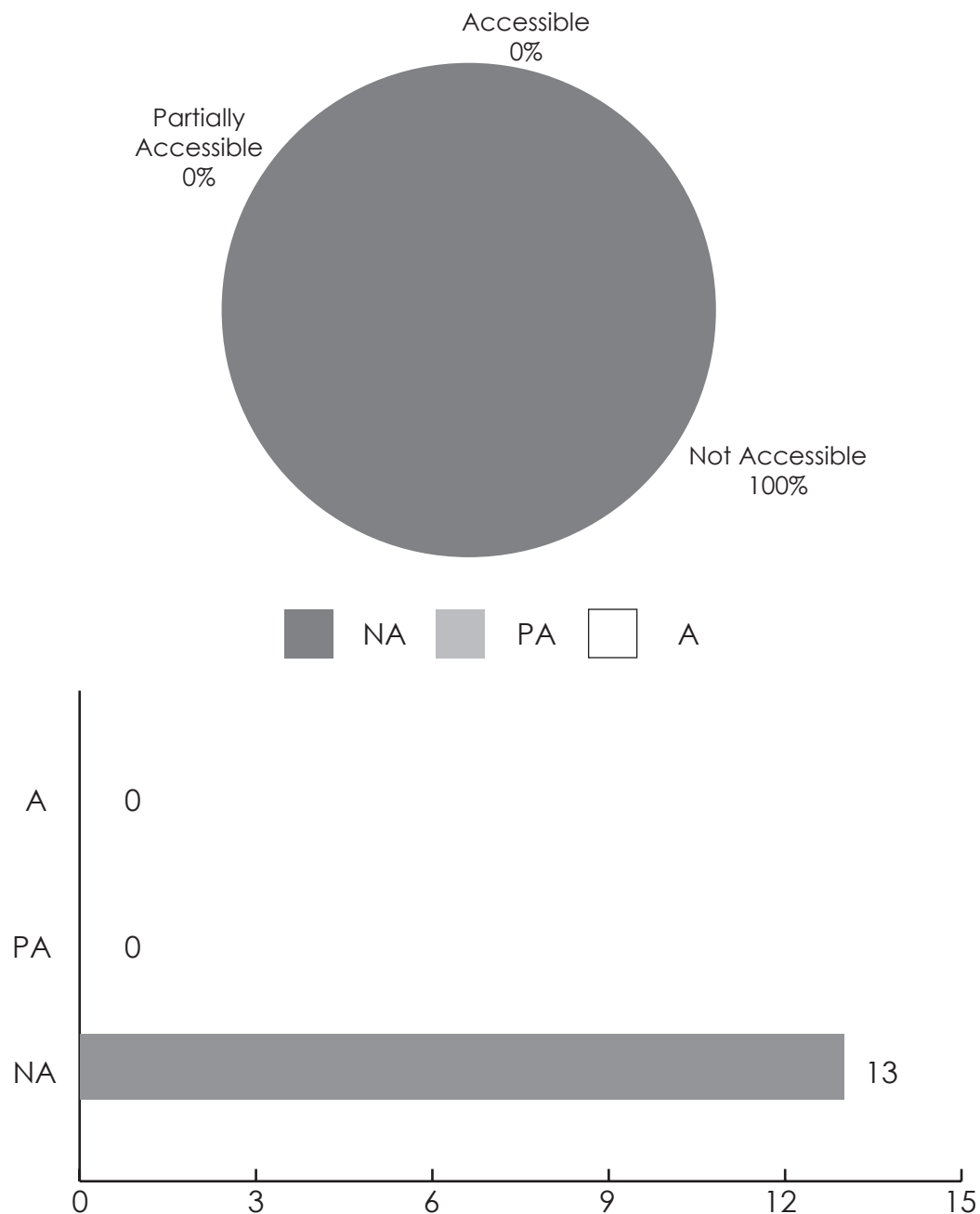


Figure 10. Accessibility status of transportation sector within Kathmandu Valley

None of the samples out of 13 taken from transportation sector within Kathmandu valley were found 'Accessible'. All of the 13 samples were found 'Not Accessible'.

## 4.2. Situation Analysis of each District

### 4.2.1. Situation of Kathmandu District

A total of 74 samples were audited within Kathmandu district. The findings are shown in pie charts and bar graphs below:

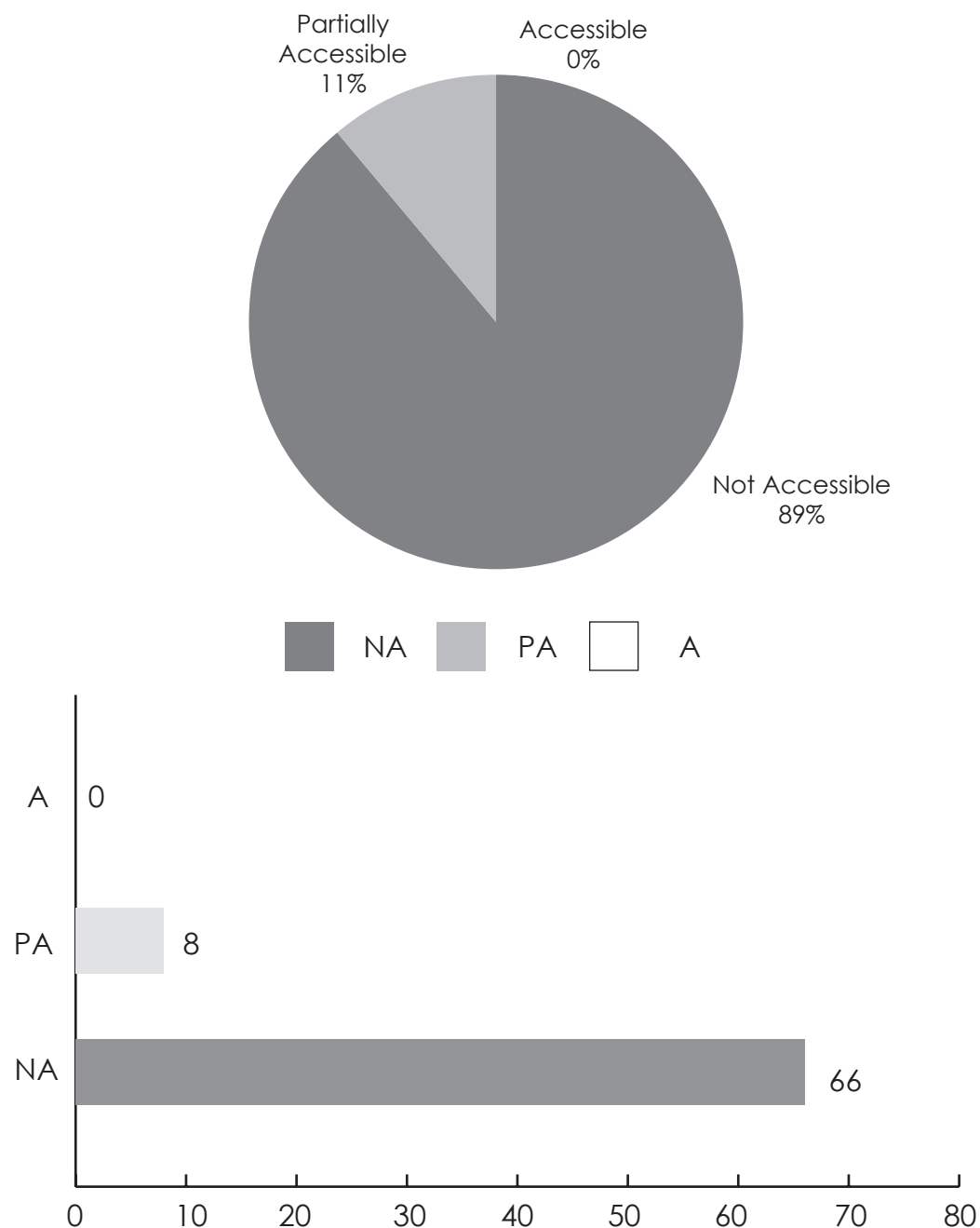


Figure 11. Accessibility status in Kathmandu district

None of the samples out of the total 74 taken within Kathmandu valley were found 'Accessible'. Out of 74 samples, 66 were found 'Not Accessible' and 8 samples were found 'Partially Accessible'.

## 4.2.2. Situation of Lalitpur District

A total of 42 samples were audited within Lalitpur district. The findings are shown in pie charts and bar graphs below:

### Accessibility Status of Lalitpur District

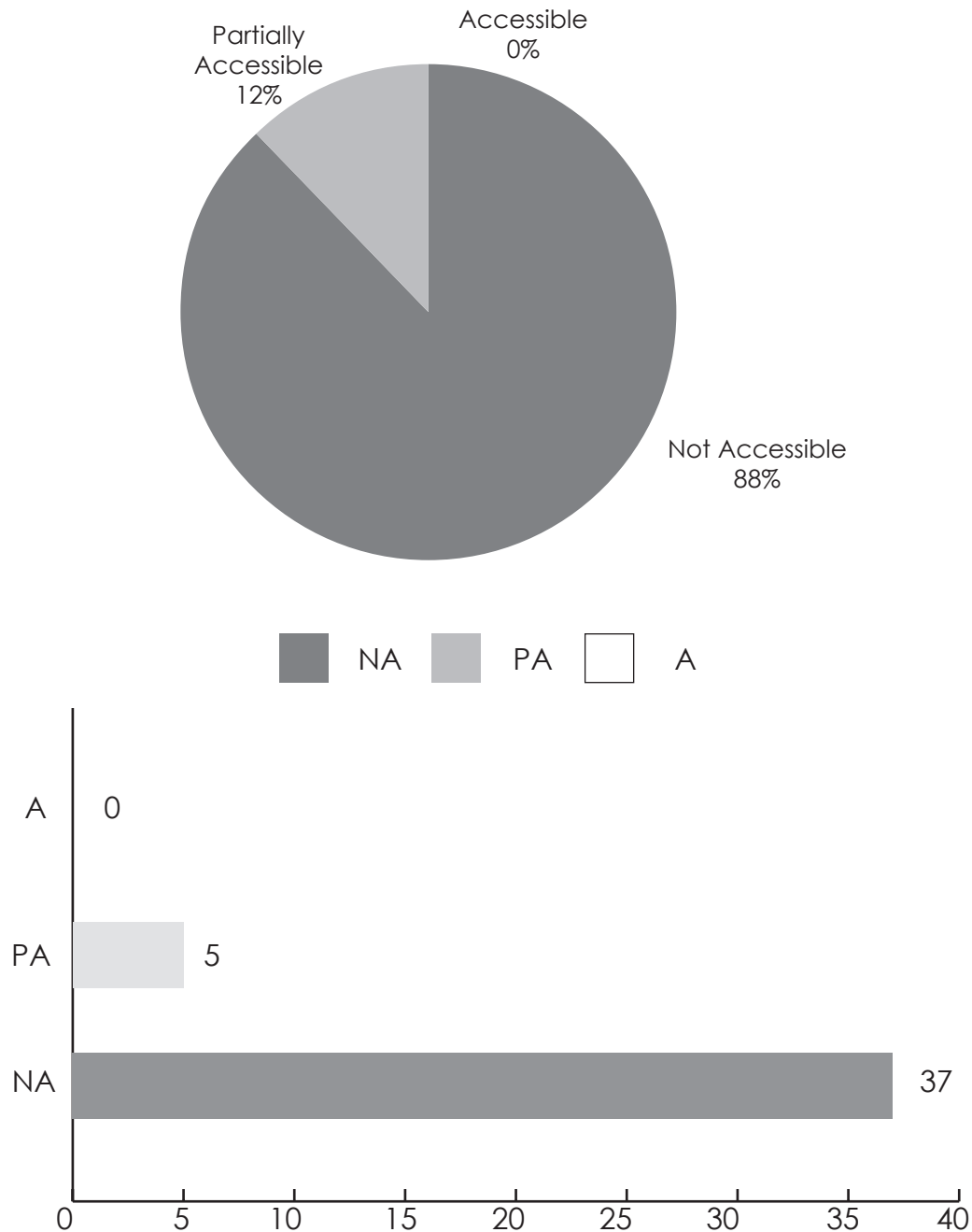


Figure 12. Accessibility status in Lalitpur district

None of the samples out of the 42 taken within Lalitpur district were found 'Accessible'. Out of 42 samples, 37 samples were found 'Not Accessible' and 5 were found 'Partially Accessible'.

### 4.2.3. Situation of Bhaktapur District

A total of 34 samples were audited within Bhaktapur district. The findings are shown in pie charts and bar graphs below:

#### Accessibility Status Of Bhaktapur District

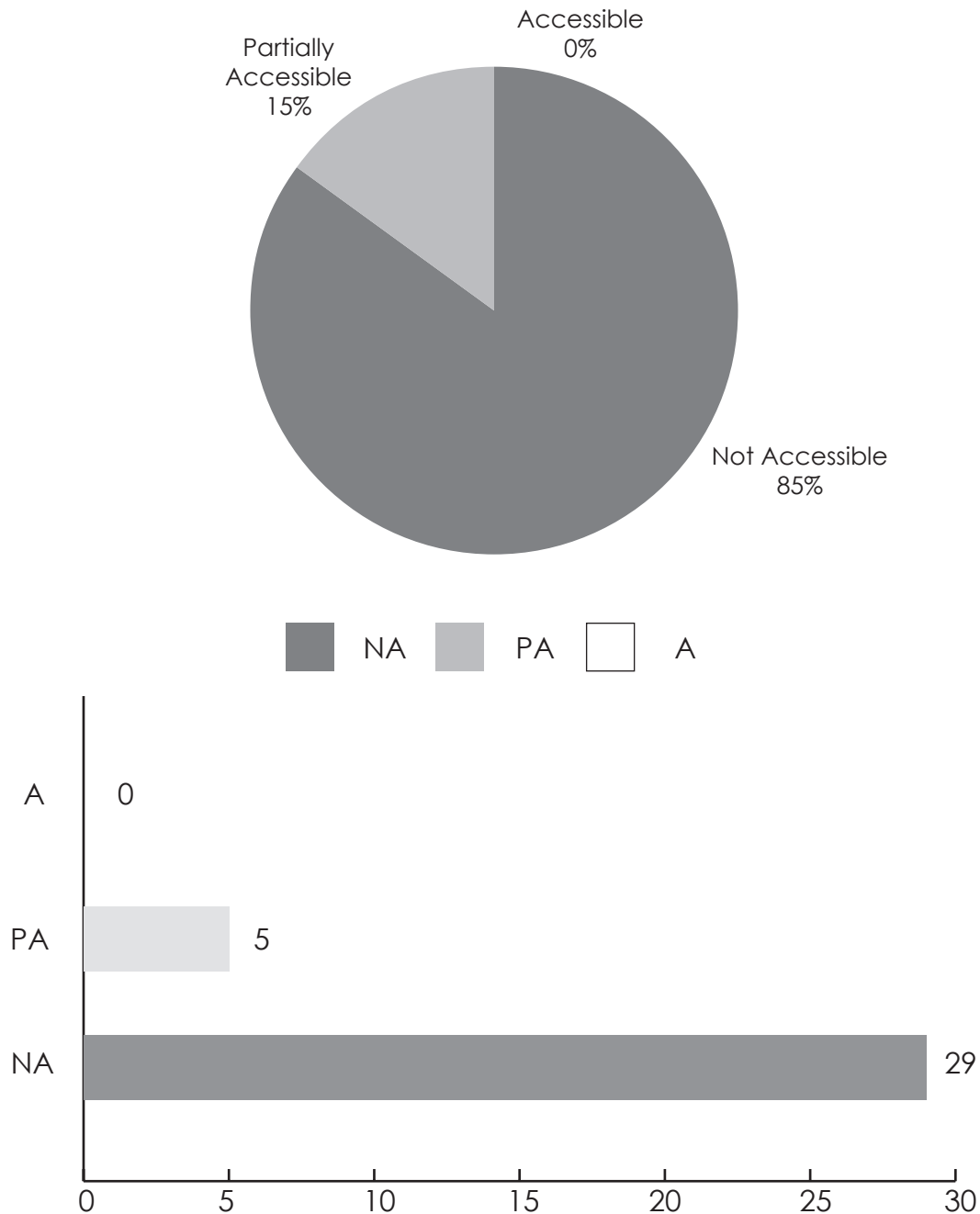


Figure 13. Accessibility status in Bhaktapur district

None of the samples out of the total 34 taken within Bhaktapur district were found 'Accessible'. Out of 34 samples, 29 were found 'Not Accessible' and 5 were 'Partially Accessible'.

## 4.3. Situation of Kathmandu Valley

A total of 150 samples were audited within Kathmandu valley. The findings are shown in pie charts and bar graphs below.

### Accessibility Status of Kathmandu Valley

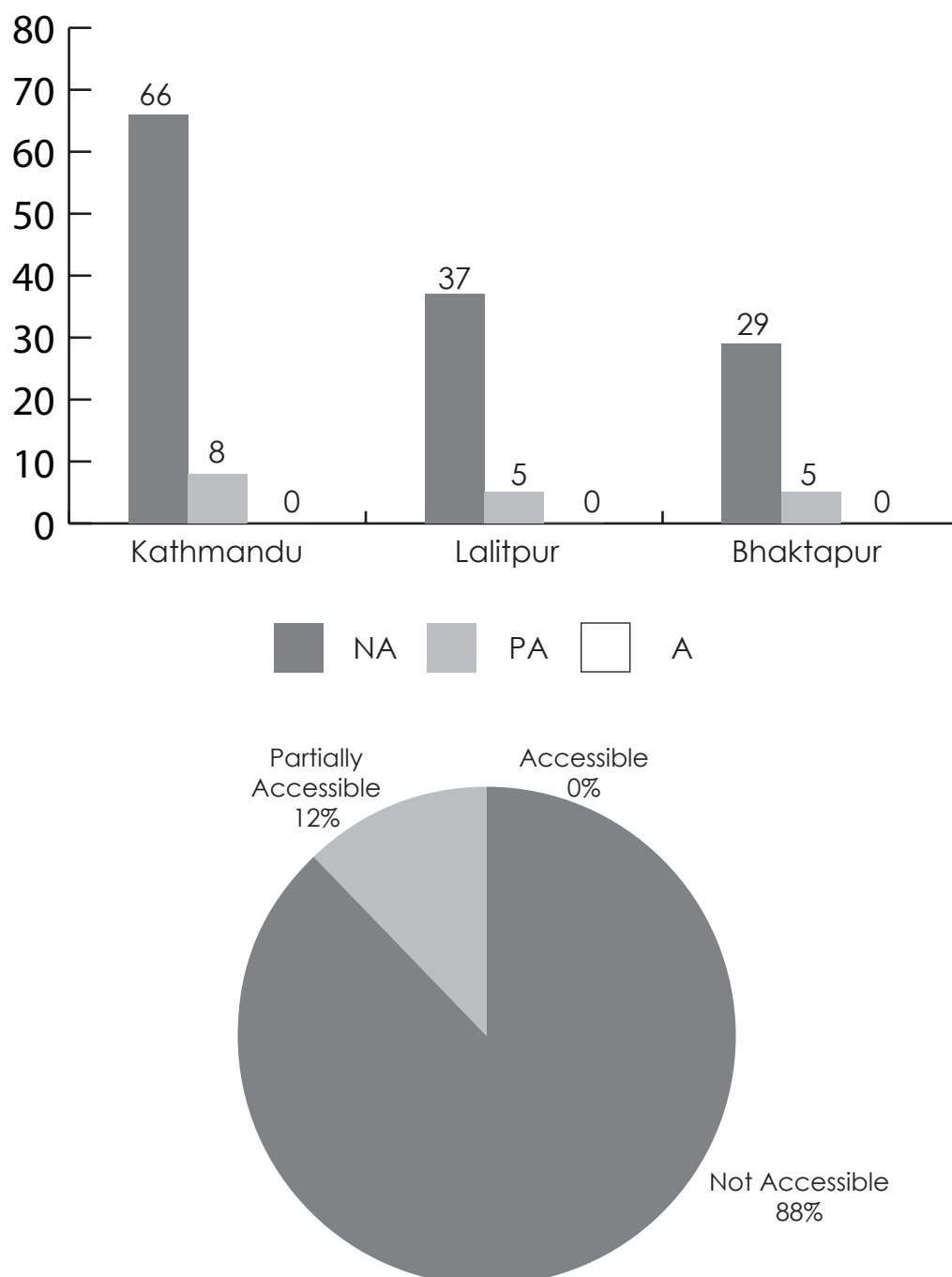


Figure 14. Accessibility status of Kathmandu Valley

None of the samples out of 150 taken within Kathmandu valley were found 'Accessible'. Out of 150 samples, 132 samples were found 'Not Accessible' and 18 samples were found 'Partially Accessible'.

## 4.4. Problem Statement

### 4.4.1. Approaching the Infrastructure

- No footpaths on the roads for access to the infrastructure.
- No curb ramps on the footpath.
- No tactile blocks on the footpath.



Obstacles blocking the access



Condition of the footpath

### 4.4.2. Parking

- Parking space not available in some of the buildings.
- No parking space allocated for people with disabilities.
- No accessible signage facilities in the parking.
- "Parking space designated for office staffs only".



Parking on the streets.



Unmanaged parking



### 4.4.3. Paths Around Infrastructure

- Paths around the infrastructure unstable and rough.
- Obstacles on the pathways blocking the access.
- No proper pathways defined.
- Curb ramp on the path not accessible.
- No proper signage on the pathways.



Inaccessible pathway



Undefined pathways

### 4.4.4. Ramp and Curb ramp

- No provision of ramp.
- Slope of the ramp do not meet standard.
- Width of the ramp do not meet the standard.
- No handrails in majority of the places. Those present do not meet the standard.
- The landing of the ramps do not meet standards.
- Access from the ramp blocked due to parking and other obstacles.



Inaccessible ramp



Main door without ramp



#### 4.4.5. Staircase

- Height of the riser exceeding the standard of maximum 6.5".
- Width of the tread less than the standard of minimum 11".
- Railing not constructed on both sides of the staircase.
- Railing height do not meet the standard.
- No proper signage for identifying the staircase.
- Obstacles blocking access to the staircase.



Steep single flight stairs



Objects blocking the staircase

#### 4.4.6. Main Entrance

- Width of door does not meet accessibility standards.
- Obstacles in the entrances.
- No signage showing the pathways to the entrance.



Entrance without ramps



Inaccessible main entrance

#### 4.4.7. Reception

- Reception area not available.
- Height of the reception do not meet accessibility standards.
- No proper audio/visual signage.
- No proper waiting area within the building.
- Staff not aware about accessibility.



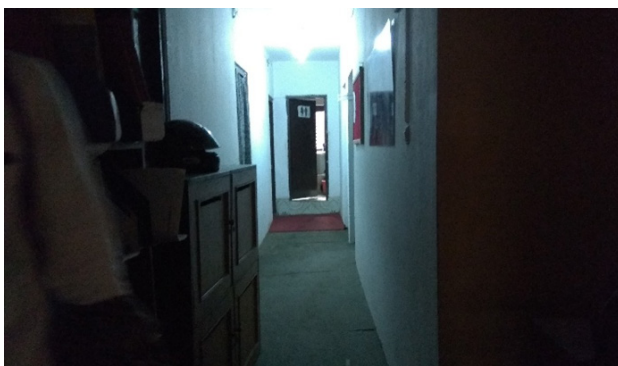
Inaccessible ticket counter



Inaccessible reception

#### 4.4.8. Corridors

- Width of the corridor does not meet the standard.
- Different obstacles blocking the access to the corridor.
- No proper signage on the corridor.
- Steps on corridor of the buildings obstructing the movement.



Corridors access blocked objects

### 4.4.9. Lifts

- No provision of lift in most of the buildings.
- Lift not accessible in all the floors of the buildings.
- Obstacles to access the entrance of the lift.
- No proper signage showing the pathways to the lift.
- Width of the lift not accessible for wheelchair users.
- Internal area of the lift not sufficient for wheelchair users.
- Absence of handrails inside the lift.
- Absence of audio/visual signage inside the lift.
- Absence of Braille facilities in most of the lifts.
- Control buttons of the lift not accessible.



Single step at the entrance of lift



Lift buttons without Braille

### 4.4.10. Signage

- No audio/visual signage available in most of the buildings
- Signage not visually accessible
- Signage not available in Braille

### 4.4.11. Drinking Water Facility

- No provision of drinking water in most of the buildings
- Height of the drinking water stand did not meet standards
- Not enough accessible space around the drinking water facilities for wheelchair users.



#### 4.4.12. Sanitary Facility

- Width of the door does not meet the standard of minimum 32 inches
- Steps on the main door blocking the access
- No proper signage in most of the buildings
- Height of the fixtures not to the standards
- Traditional toilet (pan) used in most of the buildings, which is not accessible
- Internal door width and area not accessible for wheelchair users
- Absence of grab bars on the toilet
- The faucets and flush control difficult to operate
- The internal space to maneuver wheelchair not enough



Step on entrance of toilet



Inaccessible internal toilet space

#### 4.4.13. Emergency Exit

- No emergency exit provisions in most of the buildings
- Emergency exit not accessible in some of the buildings due to obstacles
- No proper signage in most of the buildings

# 5 | ISSUES FOR CONSIDERATION

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In order to create infrastructures and communal spaces accessible for Persons with disabilities, we must follow minimum design standards and guidelines mentioned below:

## 5.1. Infrastructure – Accessible Design

### 5.1.1. Paths around Infrastructure

- Should be free from barriers and hurdles.
- Tactile should be laid on the footpath.
- All of the signage should be overhead.
- The street furniture including the benches, light posts, garbage cans should be aligned on single side of the sidewalk.
- Curb ramps should be provided on the footpath having steps and zebra crossing for easy access for people on wheelchairs and others.

### 5.1.2. Parking

- Adequate number of accessible parking (at least 1:10 ratio) should be provided.
- Accessible aisle should be provided within parking area.
- International signage on accessibility should be provided for accessible space.
- Audio visual signal/alerts for pedestrians when a car is making an exit from the parking is recommended.

### **5.1.3. Paths around Infrastructure**

- The route should be stable, firm and slip-resistant.
- The width of the route should be minimum of 36 inches (3 feet).
- Curb ramps and ramps should be provided where necessary (to deal with the level differences).
- Accessible signage should be provided showing the directions and necessary information.

### **5.1.4. Ramps**

- The slope of the ramp should be minimum ratio of 1:15 i.e. every 1" of vertical rise requires at least 15" (15") of ramp length for new construction and 1:8 to for maintenance of existing infrastructure.
- The width of the ramp for rolling the wheelchair should be at least 36 inch (3feet) excluding space of grab bars.
- A level landing of 60 x 60 inches (5'x5') should be provided on top and bottom of the ramp.
- There should be a triple height handrail provided on both sides of the ramp of 3 feet height for adult, 2 feet 3 inch for children and 2 inch for safety purpose, which enables users to choose the handrail most appropriate for them.
- The length of a single run of any ramp should be 9 m at maximum or not more than 30ft.
- The ramp should be stable, firm and slip-resistant.
- The ramp should be framed with contrasting pavers providing a visual cue to the presence of the ramp.
- The handrails should extend 1 foot (12 inches) beyond the top and bottom handrails.

### **5.1.5 Staircase**

- Tread of the step should not be less than 11 inches (280mm) wide.
- The height of the step should not be more than 6.5 inches (165mm).
- Continuous railing on both side with height between 34 and 38 inches should be provided.
- The handrails should extend 12 inches beyond the top and bottom handrails.

### **5.1.6. Doors**

- The clear opening of the door should be at least 32 inches, when the door is open 90 degrees.
- The threshold of the door should not be more than ¼ inches.
- The door should be opened easily (5 pounds maximum force).
- The operable parts of the door should be strictly between 34 inches and 48 inches.

### **5.1.7. Interior Accessible Route**

- The route should be firm, stable and free from obstacles.
- The route should be at least 36 inches wide.
- Accessible signage should be provided where necessary.

### **5.1.8. Lift**

- The width of the door opening should be minimum of 32 inches.
- The height of the control buttons should exceed 48 inches with.
- The control button should be available in braille.
- The lift should have an audible sound when stopping at any floor.
- The lift should have hand-bars or other supporting system.

### **5.1.9. Sanitary Facilities**

- At least one separate accessible toilet facility should be provided for Persons with disabilities if other toilets do not have the minimum accessibility features.
- The entrance of the toilet should be barrier free.
- Ramps should be provided if there are any steps at the entrance of the toilet.
- If the internal area of toilet is not accessible for certain users, it is recommended to construct another toilet by following the proper standards.
- Top edge of the basin should be at maximum height of 34 inches.
- The faucet and flush control should be easy to operate.
- The horizontal and rear grab bars should be provided according to standards.
- Braille notices should be placed for the identification of the toilet. Such Braille notices should be at a maximum height of 42 inches from surface, so that people with visual impairments can easily reach it with their hands while standing.

### **5.1.10. Signage**

- The signage should be clearly visible and the symbols and text should have proper color and luminance contrast with their background.
- The signage should have tactile characters and symbols with the text and pictorial presentation.
- There should be consistent use of color to denote key design elements and entrance points if any maps are present.
- The video and electronic signage display should be provided to ensure no one misses important information.
- Text announcement should be provided with contrasted and appropriate symbol of access for people with hearing impairments.

Besides adapting these parameters, we also need to raise awareness and interest among the public about accessibility.

## 5.2. Awareness

### Some Perceptions on Accessibility

Following are some of the quotes shared by people in several of our locations during the accessibility auditing process:

- A. “Before the accessibility audit, we were not aware of disability and importance of accessible buildings”.  
- *A senior staff of a health centre*
- B. “We wanted to make our buildings accessible but the cost is very high that we can't afford for”.  
- *A teacher of a community school*
- C. “Our building is accessible because we have constructed a ramp on the entrance of the building”.  
- *A chief of a government office*
- D. “We have accessible toilet but it is usually locked. We only open it when disabled people come to use it”.  
- *A woman staff from a public toilet*

A majority of the people were unaware about accessibility and considered adding accessible features to the buildings as a major financial burden. Most of the buildings that claimed to have accessibility had not considered all the barriers related to mobility and the concept of providing accessibility to Persons with disabilities among authorities was largely limited to constructing a ramp only at the entrance, which is a misconception.

Likewise, buildings that had ramps had not followed the proper standards of constructing a ramp, mostly due to the lack of technical consultations.

The structures that met the appropriate standards were termed ‘disabled friendly’ that often created hesitation among its users. This reduced the effectiveness of these structures, especially those that met the universal design principles. We therefore, need to raise awareness and interest among the public about the concept of accessibility, universal design, plans and policies along with their benefits for Persons with disabilities and rest others through workshops, campaigns, and use of mass media.

## 5.3. Attitudinal Behaviour

Following are the perception shared by few people at the audit sites:

- I. “We don't need accessible features in our buildings because there are no staff with disabilities”.  
- *A woman from business house*



- II. "Disabled people don't come in our buildings, so we do not need to include the accessible features in our here".  
- A chief of district level government office
- III. "We usually don't have visitors that are disabled. If such people want to enter our buildings, we assist them through the premise ourselves, so we don't need accessible features in our premises".  
- A branch manager of a bank
- IV. "We have specially added the accessible features in our buildings for those poor people".  
- A chief of district level government office

Attitudes are a complex collection of beliefs, feelings, values and dispositions that characterizes how we think or feel about certain people or situations. Attitudes are transient and differ from person to person, group-to-group and even within groups over time. The most formidable barrier that individuals with disabilities face is often found in the behavior of others. Persons with disabilities often go through face prejudices from society. They often feel ignored or otherwise feel their existence discounted. Majority of the normal public tend to see Persons with disabilities as an object of pity and also an additional burden to the family and society. This is a result of the lack of understanding on what disability is and what might be the potential discriminations on the ground of disability.

Above-mentioned are some of the quotes we came across during our accessibility audit. Most people have a false understanding that Persons with disabilities are not as mobile as people without disabilities and therefore do not need to construct accessible infrastructures. However, their mobility is highly limited due to the lack of accessible infrastructures, discrimination and even social stigma attached to being a person with disability.

Certain social constructions of disability portray people with disabilities as "others" and not as an integral part of the society. People with disabilities are commonly considered to be in need of care and this undermines peoples' ability to see people with disabilities as autonomous people. People with disabilities are often treated as an outcast.

Women and girls with disabilities are having double or triple discrimination based on their disability and gender. The needs of persons with invisible disabilities are often highly underestimated I.E. persons with intellectual disabilities, psychosocial disabilities, autism, hearing disabilities, visual disabilities, and deaf-blind while preparing the physical infrastructures, transport system and information communication services. The attention was not given for fixing appropriate signage, management of loud noise, use of color contrast; braille; audio and graphical presentation. Such kinds of people were thus found to be in trouble or misguided in public places during the audit.

The most damaging of all perception regarding Persons with disabilities is the low expectations others have of them and, as a result, many Persons with disabilities

have for themselves. People do not expect Persons with disabilities can work as the other population, so when Persons with disabilities present themselves for a job, the experience is novel and employers worry about their productivity, the likelihood of many sick leaves, disruptions in work flow and chances of putting the customers off in case of front line jobs.

The primary reason for negative attitude and perception to disability is the lack of visibility and integration of Persons with disabilities in mainstream society. This lack of integration results in a marginalization of those with disabilities and ignorance and fear on the part of people stemming from their inexperience of learning, living or working alongside Persons with disabilities.

Beside the different campaigns, mass media can play the powerful role in shaping public opinion and creating or changing attitudes through information and education. The media should highlight successes of people with disabilities, rather than focus on them only when they are in need of help. This will help to change the view that people with disabilities are a burden or a social liability. Finally, Persons with disabilities themselves have a duty to try to change society's attitudes by their skills, their work, and their positive attitude towards life. They should not resign themselves to prejudice and disrespect from others or from the media. They need to appeal the media to present accurate stories, and positive, non-stereotyped images of Persons with disabilities.

## **5.4. Plans**

Accessibility is a broader concept and requires advocacy, expertise, tireless effort and supportive system as well. Accessibility and its prospects are relatively new for Nepal. The directives regarding accessibility for Persons with disabilities were only formulated in 2069 B.S and so majority of the buildings constructed before 2069 B.S. do not have accessible infrastructure. However, those constructed afterwards have also failed to incorporate the standards.

It is a tough task and an expensive one to change all the structures into accessible at once however, immediate actions and plans and strong monitoring process with mechanism to improve the conditions is imperative. Both short-term and long-term plans and policies is a must to the change the overall status of the Persons with disabilities.

### **5.4.1. Short Term Plans**

To start with, we first need to set up priorities on how we should change infrastructures and facilities. For instance, the first level intervention can be done on the ground or lower floors of the existing buildings. It is also recommended to build the most needed facilities and services at the ground floor, if improvement of upper floors is not possible for the time being. The infrastructures and other services such as parking, ramp, entrance doors, reception, corridors, staircase, lift, toilet and emergency exits should adopt minimum standard, codes and practices. Priority should be given to people with disabilities and any new buildings should be made accessible for all.

## 5.4.2. Long Term Plans

Make long term plans that helps establish accessible public buildings and communal spaces for all. Beyond this, Broader vision that promotes the inclusive, safe and resilient urban planning is a must. Based on priorities, those that do not fall in the short-term plans can be included here. Disability should also be included in the academic course/curriculum in order to raise the awareness and develop a positive attitude towards Persons with disabilities. Stakeholders should be given training programs and an exposure to people with different forms of disabilities. Efforts should be made to for integration of the Persons with disabilities with rest of the society for better understanding of one another.

## 5.5. Tools, Technique and Procedure

A majority of the people are unaware of the importance of the audit checklist, however it is a very important tool, to identify the barriers and provide essential solutions on accessibility and universal design principles. The checklist is applicable for various different sectors as included for this accessibility audit and it would also be useful for different structures i.e. buildings, parks, transport lanes and others. The audit checklist for some can be a bit complicated since it includes questions from diverse sectors and can be bulky however with training and awareness program regarding the use and importance of the checklist its use can create useful results. However, there still are issues that the audit checklist has yet to cover I.E issues of gender and those people with invisible disabilities which are generally ignored even in the public domain.

Since the government does not have an updated accessibility standards and codes, firstly, the government should include other accessibility related standards to fit with universal design principles and the checklist should be modified with reference to those updated guidelines. This can be done based on the updated technologies as well. The checklist should be reviewed between one to two years on a mandatory basis. For the accurate and precise calculation, it is also recommended to adopt the new tools and technologies.

Joint group of technical personnel, user groups and concerned authorities carry out the accessibility audit. It helps to identify the practical barriers within the area and through discussion, the alternate solution to the barriers. The involvement of those persons with learning/developmental disabilities, psychosocial disabilities or deaf-blind can really provide the insides going beyond the physical barriers. The use of digital tools such as lasers and tools for calculating slope and force helps provide more accurate data and make the audit precise and accurate. Likewise, photographs and videos can also be used to minimize errors.

# 6 | SPECIAL RECOMMENDATIONS

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## 6.1. For the Government:

**1.** The government needs to take effective measures in addressing the current scenario and problems immediately and focus on the overall improvement in the implementation aspect of the approved accessibility standards. Accessibility audits like this should be performed across the nation to suggest the potential improvements in line with the approved and updated standards. It is also recommended that government has to engage with various non-governmental organizations, private sectors and Disabled People's Organizations (cross DPOs) in conducting accessibility audit and correction /improvement related activities. The concerned government agencies that can play a key role in implementation of these recommendations are Office of the Prime Minister, Council of the Ministers, municipality offices, Ministry of Federal Affairs and General Administration, Ministry of Physical Planning and Ministry of Urban Development among others.

**2.** This report shows that although the guidelines have been established, they are not properly implemented in practice. It is mandatory for the concerned personnel and government authorities to apply the guidelines in all stages of design and construction works. This recommended is mostly targeted to Ministry of Physical Planning and Transport Management, district division offices of Department of Urban Development and Building Construction (DUDBC) , Department of Road (DOR), Department of Transport Management (DOTM), all municipal offices and other implementing agencies.

**3.** The bylaw of the government, Nepal Building Code (NBC) also does not cover the accessibility features and standards except the provision of the ramps and some other minor things. So, the bylaws should be revised and should include the accessibility standards and guidelines for constructing the public buildings and communal spaces. For the public physical infrastructures and other services, the accessibility guidelines should be made mandatory and established as the integral part of the building code. It is also essential to revise the accessibility guidelines that the government of Nepal adopted in 2013. The responsibilities of these recommendations mainly go to Ministry of Urban Development (MOUD), DUDBC and Ministry of Women, Children and Senior Citizens.

**4.** In order to achieve agendas 2030, government must ensure all of its program for city and settlement such as “Mega-City”, “Smart City”, “Satellite City”, “People’s Housing Program”, “One City One Identity”, “Resettlement of Earthquake Affected People” and others have incorporated universal design principles and accessibility standards through all of its phases i.e. planning /designing, implementation and monitoring and evaluation. Those all accessible structures having universal design principles should also be sustainable, affordable, inclusive, green and quality public spaces and services beside the concept of safety and resiliency. The key agencies for this recommendation are National Reconstruction Authority (NRA), MOUD, DUDBC and all municipalities/rural municipalities.

**5.** All stakeholders, particularly government officials, engineers and contractors need to be trained on accessibility standards and universal design principles to be adopted while constructing public facilities.

**6.** Government should work in collaboration and partnership with the local level, public transport operators, local communities and other relevant stakeholders to build an accessible public transport systems and communication services among others.

## **6.2. DPO and Other Civil Society Organizations**

**1.** DPOs and other CSOs should raise their voice to address various forms of barriers that have hindered the equal participation of Persons with disabilities. They should raise awareness on issues of disability and accessibility throughout the country and promote disability issues from rights based approach. They should introduce and include disability and accessibility issues as a key agenda of development process.

**2.** Collect information, data, case studies and evidence related to accessibility implementation status, barriers faced by persons with disabilities and some good models on universal design principles and advocate ensuring access of persons with disabilities to public physical infrastructures, transportation system and information

communications services and technologies based on the collected information and evidence such as indicators for Smart city and other programs.

- 3.** Provide trainings and orientation on accessibility and universal design to be applied in public facilities to all stakeholders, particularly municipal/rural municipal engineers and technicians.
- 4.** Coordinate and collaborate with concerned stakeholders including government to design, implement and monitor those programs that deal with the issues of accessibility, inclusion and other related issues.
- 5.** Create (or encourage to create) some model work on accessibility and universal design in different municipalities in collaboration with government and other development partners.
- 6.** Use standard tools and audit checklists while carrying out accessibility audits in collaboration with relevant technical experts and make recommendation to the relevant agencies.

## **6.3. Private Sector**

- 1.** Follow the step-by-step procedure and make use of essential tools to carry out the accessibility audit of as many public structures, places and services and take corrective measures to make them accessible for all. Ensure DPOs and users from diverse field along with technical persons are also engaged during the whole process.
- 2.** Persons with disabilities are productive labour force too. Therefore, promote accessible work place, market, shopping centres, information technologies, road and transportation services, production and sale of other goods and services targeting Persons with disabilities.
- 3.** Make all tourism places in Nepal accessible to all including Persons with disabilities or at least the World Cultural Heritages in Nepal to promote accessible tourism in the country.
- 4.** Ensure that private transportation services are accessible for all providing equal access to Persons with disabilities as others.
- 5.** Ensure that all services, benefits and programs of private sector are accessible, safe and inclusive for all.

## 6.4. I/NGOs, UN Agencies and Other Development Partners

- 1.** Follow the step-by-step procedure and make use of essential tools to carry out the Accessibility audit of public structures and services that the agencies and their local partners are responsible for. Take corrective measures to make such structures and services accessible for all. Ensure DPOs and users from diverse field along with technical persons are also engaged during the whole process.
- 2.** Ensure organizations/agencies/authorities abide by the approved minimum accessibility standards and other relevant guidelines in all stages of design and construction works.
- 3.** Ensure the governing policies/guidelines, planning process, operational modality, monitoring and evaluation mechanism are guided by the principles of universal design.
- 4.** Ensure access to and inclusion of Persons with disabilities in development programs supported and implemented by national and international non-governmental organizations in various areas. Collaborate and partner with Disabled Peoples' Organizations (cross DPOs), while implementing targeted programs.
- 5.** Promote Universal Design principles and accessibility standards in all kinds of programs to ensure effective and meaningful participation and reduce risk for all.
- 6.** All the I/NGOs, UN agencies and Development Partners who are working in Disability Inclusive Development (DID) should ensure that accessibility is one of the compulsory components of their programs and activities.



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