

## Conference Paper

# How Accessible is Tourism for People With Disabilities?

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Previous research has examined the accessibility of people with disabilities to tourism, but no one has examined specifics based on the type/specificity of persons with disabilities. This study compares the accessibility of tourism for people with hearing, blind, and physical disabilities based on their needs and experiences. This study uses a qualitative-comparative approach with content qualitative analysis. Interviews were conducted with key informants, namely people with deaf, blind, and physical disabilities who have experience traveling in the city of Bandung and its surroundings. Based on the results of the analysis, this study concluded that the deaf have greater access to tourism attractions than the blind. The availability of guides or assistants affects the accessibility of tourism for the blind, the availability of infrastructure or visual media affects the accessibility of tourism for the deaf, and the availability of physical infrastructure affects the accessibility of tourism for the physically disabled. This affects the opportunities for persons with disabilities to have attractive and comfortable travel experiences known as friendly tourism. This study recommends improving the accessibility to tourism for persons with disabilities by focusing on improving main services and infrastructure according to the needs of those with the disability.

**Keywords:** disabilities, friendly tourism, accessibility, infrastructure

## 1. INTRODUCTION

Tourism sectors should be enjoyed by everyone, including tourists with disabilities. Basically, tourism includes availability, accessibility, and attractiveness. Availability means a tourism object that is within the reach of tourists. Accessibility implies a tourist attraction that can be accessed freely by anyone. The attractiveness address the following expectations [1]. These things are often not obtained by tourists with disabilities. Based on data from the World Health Organization (WHO) and the International Labor Organization (ILO) [2], persons with disabilities are the largest minority group in the world, or more than one billion people from the world's population and about 10 percent of the Indonesian population. People with disabilities often face limited access to not only access to health, education, and decent work, but also tourism. The international convention

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on the rights of persons with disabilities (Convention on the Right of Persons with Disabilities/CRPD) which has been ratified by Indonesia in Law no. 19 of 2011, and Goal of Sustainable Development Goals (SDGs) point 11 ensures that persons with disabilities have access to places of recreation, entertainment, and tourism [3], [4]. In this regard, there have been many discourses on the concept of tourism that promotes equality or justice for persons with disabilities, such as the concept of friendly tourism or friendly-tourism [5]–[7], accessible tourism [6], and sustainable tourism. tourism that promotes inclusiveness. In essence, these concepts emphasize the need for access to tourist attractions through a series of services and facilities that enable people with special needs (persons with disabilities) to enjoy their holidays and free time without hindrance [8].

Generally, they are distinguished based on the type of disability, namely physical, sensory, and mental [9]. Each type has different needs for infrastructures. Infrastructures for physical disabilities can be in the form of a caddy car

or wheelchair rental. Infrastructures for sensory disabilities can be in the form of tour guides using sign language, tour guides using special audio, and braille maps. Infrastructures for mental disabilities can be in the form of special programs and activities that have been adapted at tourist attractions [10]. Regarding friendly tourism, each tourist attraction is designed friendly to tourists with disabilities. Tourism object design arrangements that pay attention to tourists with disabilities are basic things that must be met by tourism objects to be inclusive [11]. Inclusive tourism by paying attention to tourists with disabilities could fulfil the basics of tourism which include availability, accessibility, and attractiveness. The basic design that needs to be placed in every tourist attraction must be universal. Some examples of universal infrastructures include wheelchair entrances and handrails for types of physical disabilities, tactile floors, or special pathways for the disabled [12] along with maps and directions for types of sensory/sensory disabilities, as well as directions and mental health posts that can be accessed by anyone and any time for the type of mental disability [13]. In addition to special things as above, tourist attractions must also pay attention to the existing amenities so that tourists with special needs can use these amenities. Universal amenities can start from providing wheelchair entrances, disabled toilets, to special parking spaces for the disabled [14].

In Indonesia, West Java is the province with the most people with disabilities at 13 percent, the next is East Java Province at 11 percent, and Central Java Province at 8 percent. Objects of this study are tourist destinations in Bandung City, Bandung District, and West Bandung District. This region has many and varied tourist destinations. This study aims to identify the extent of accessibility of persons with disabilities in

enjoying tourist attractions in tourist destinations in the three regions. Previous research has examined accessibility tourism in general but has not explained the differences between persons with deaf, blind, and physical disabilities [15]–[18]. Thus, this study conducted a comparative study on the accessibility of persons with deaf, blind, and physical disabilities who have experience traveling in the city of Bandung and its surroundings. Then, this study examines the differences, similarities and needs of persons with disabilities in enjoying tourist attractions.

## 2. METHODS

This study uses a qualitative-comparative study approach and content qualitative analysis [19], [20]. A comparative study was conducted to find similarities and differences regarding the extent of tourism accessibility and the need for infrastructures for persons with disabilities in traveling. Interviews were conducted with key informants, namely persons with deaf, blind, and physical disabilities who have experience traveling in the city of Bandung and its surroundings. We interviewed 15 key informants of which 12 were persons with disabilities. Sampling using purposive and snowball techniques until the data is saturated. In addition, we conduct participatory observations with key information and observe infrastructures at tourist destinations. This study examines the travel experiences of persons with disabilities to tourist destinations in Bandung City, Bandung Regency, and West Bandung Regency. In this study, the analysis focuses on 10 (ten) tourist destinations, most of which are educational/artificial tourism types, and the rest are nature tourism, namely *Farmhouse*, *The Great Asia Afrika*, *Lembang Zoo*, *Floating Market*, *The Lodge Maribaya*, *Begonia Gardens*, *Fairy Garden*, *Bandung Zoo*, *The Kings*, and *Situ Patenggang*. Accessibility analysis is measured by identifying the availability of infrastructure for each person with disabilities, including stairs, ramp, signs/marks, toilet, pedestrian trail, guide path, visual media, classification of hearing, and touch. Criteria and indicators sourced from Minister of Public Works Regulation No. 30 of 2006 and Bandung City Regional Regulation No. 26 of 2009 concerning Equality and Empowerment of Persons with Disabilities The data is sorted according to the analysis variables, then data processing and analysis are carried out. Data analysis was carried out by making comparisons, identifying patterns and relationships between data for further conclusions drawn. The data validation process is carried out using triangulation of data sources and informants.

### 3. RESULTS AND DISCUSSION

Inclusive or friendly tourism paying attention to tourists with special needs will meet the basics of tourism which include availability, accessibility, and attractiveness. Tourism object design arrangements that pay attention to tourists with special needs are basic things that must be met by tourist objects to be inclusive [14]. Every tourist destination should have supporting facilities that are designed to be friendly to tourists with special needs. The following are the findings from the analysis that has been carried out. Tourist attractions for the blind, deaf, and physically disabled have different characteristics. For the blind, tourist attractions are activities to enjoy the atmosphere by hearing various sounds at tourist sites, ride rides such as boats, horseback riding, and others with instructions given by a companion. Meanwhile, for the deaf, tourist attractions are in the form of activities to enjoy the atmosphere of tourist sites,

watching cinemas, various rides, and other attractions through writing that guides them to see and enjoy these attractions. Furthermore, for the disabled, tourist attractions are in the form of activities to enjoy the scenery, performing arts, education, and so on. The characteristics of these tourist attractions affect infrastructure as access for people with disabilities to fulfill their travel goals.

Tourist destinations provide universal amenities and have not met the needs of persons with disabilities in enjoying tourism. Some examples of universal facilities include wheelchair entrances and handrails for the type of physical disability, tactile floors or special paths for the disabled [12], provision of wheelchair entrances, disabled toilets, and special disabled parking lots [14]. However, maps and instructions for the types of sensory/sensory disabilities [13] are not yet available. As can be seen in the table 1, the deaf has greater access to tourism attractions than the blind and the physical disabilities. Unlike the blind, the deaf can access various types of tourist attractions. They can enjoy visual attractions (scenery) and attractions that require mobility and physical strength independently (such as riding certain rides). However, the visually and physically disabled also can enjoy these attractions with several conditions, including not being crowded with visitors so that the atmosphere or conditions are quieter, the presence of a guide or staff who guides, and adequate supporting facilities specifically for persons with disabilities.

Infrastructure for the blind, such as special guide lanes, is not yet available in all locations, but there are public pedestrian paths. This path can be accessed by the blind but still needs a companion to direct the path, especially for tourists who have never been to this location. Blind people can enjoy tourist attractions through explanations

TABLE 1: Availability of infrastructure for persons with disabilities.

Tourist Destination	Accessibility Based on Infrastructures							
	Deaf	Blind			Physical Disabilities			
	SM	VM	GP	S	CHT	S	R	T
Great Asia Afrika	V	X	X	X	X	X	V	X
Farmhouse	V	X	X	V	X	V	V	V
Floating Market	V	X	X	X	X	X	X	X
Begonia Garden	V	X	X	X	X	X	X	X
The Lodge	V	X	X	V	X	V	V	X
Fairy Garden	V	X	X	X	X	X	V	X
Lembang Zoo	V	X	X	X	X	X	V	V
Bandung Zoo	V	X	X	X	X	X	V	V
The Kings	V	X	X	X	X	X	V	X
Situ Patenggang	V	X	X	X	X	X	X	X

S = Stairs; R = Ramp; SM = Signs/Marks; T = Toilet; PT = Pedestrian Trail; GP = Guide Path; VM = Visual Media; CHT = Classification of Hearing and Touch

from relatives and tour guides, even though they are limited. However, this condition can be optimized through an auditory touch replica infrastructure. This tool makes it easy for people with disabilities to enjoy tourist attractions through replicas that resemble and can be held without having to damage attractions or hurt animals. This replica is also equipped with sound effects that support it. Meanwhile, for the deaf, infrastructure such as signs and directions at tourist sites is adequate. However, visual education media regarding tourist attractions and the skills and responses of employees are still limited, especially for people with disabilities who are not accompanied by relatives. Therefore, hearing disabilities people need facilities such as blackboards or visual screens as communication tools and visual education media regarding tourist attractions.

Persons with disabilities are still unable to obtain tourism information independently according to their needs. For persons with disabilities, besides being a wheelchair driver, this companion is also tasked with showing the way, whether it's the route or every space in the tourist location. The guide is the main key for people with disabilities, especially for those with total blindness. Some blind people who are members of the community, travel can be accompanied by blind people with low vision while still needing adequate infrastructure. For the deaf, communication skills and employee responsiveness to their needs are still limited. This condition results in requests for the deaf to be responded slowly or not as expected, for example when asking about tourist attractions or buying souvenirs. Meanwhile, for physical disabilities, they need services to help them push their wheelchairs, especially from parking to the entrance that has been provided. For

this reason, employees must have at least basic knowledge regarding how to push, brake, and stop wheelchairs.

Based on these findings, the researcher identified infrastructure needs by considering the specificity of the disability. The following is an infrastructure that is also recommended to be equipped in tourist destinations in the city of Bandung and its surroundings (table 2).

TABLE 2: Required Infrastructures Based on Disability Specificity.

Required Infrastructures		
Person with deaf	Person with blind	The person with physical disabilities
Whiteboard Visual screen as a tourist attraction information provider Information text of tourist attractions Signs or directions/appeals Table with Chairs Opposite Emergency sign	Clarification of hearing (miniature & audio) related to tourist attractions Guide path The floor is not slippery Stairs using handrail Wand Preparation Easily accessible attractions such as boats, swings, animal rides	Special toilets for the disabled and special toilet seats Handrail around the toilet Ramp Gentle slope Wide entrance Wide pedestrian path Disabled parking with a wheelchair sign Wheelchair-only evacuation routes Area to enjoy sightseeing with wheelchair

In brief, the infrastructure needs include deaf people need information related to attractions, both in the form of text and visuals as well as signs as instructions or appeals, blind people need hearing aid clarification, miniature audio is put together in one place, the person with physical disabilities needed a special area with tourist spots as well as special parking that is easily accessible to the entrance.

#### 4. CONCLUSION

Accessibility is the main criterion in promoting friendly tourism for persons with disabilities. Accessibility can be demonstrated through the provision of infrastructure that facilitates and makes it easier for someone to enjoy and fulfill their needs [6]–[8]. In traveling, accessibility for the blind requires the need for a guide who shows each location and description of the surrounding environment, for the deaf it requires the need for signs or signs as directions, for the physical disabilities require the need for facilities equipped with ramps, paying attention to the slope of the ramp, pedestrian paths, special toilets disabled, and wide entrance access. the infrastructure ensures that people with disabilities can access tourist attractions, although it has not yet determined whether disabilities are satisfied or not. For this reason, it is important to pay attention to the convenience of people with disabilities in using the infrastructure. Based on this

study, the deaf has greater access to tourism attractions than the blind and the physical disabilities. although in general, people with disabilities have not met the needs of persons with disabilities in enjoying tourist attractions. Therefore, tourism managers need to improve the main infrastructure and skills of their employees in serving the needs of the deaf, blind, and physically disabled. local governments need to promote and support tourism managers to realize disability-friendly tourism.

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