

FACILITIES FOR THE DISABLED IN PUBLIC BUILDINGS IN SRI LANKA

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ABSTRACT

The disabled community has gained an increasing attention in the current world. It is widely accepted that the disabled persons should also be given the equal opportunity to participate in social activities and take pleasure in life similar to the others. It is everyone else's responsibility to let them join in such activities, without disregarding their existence. In this regards, design and construction of public facilities with the provision of special facilities such as ramps for wheel chairs, special parking bays and sanitary facilities for disabled persons have become a major consideration in the construction field today. This paper presents outcomes of a survey conducted to investigate the extent of implementation of such facilities in existing buildings in Sri Lanka. Firstly a set of required facilities was selected after conducting a comprehensive literature review. Secondly, the survey was conducted on several important public buildings in number of districts covering the most of the area in Sri Lanka. Then the data of the availability of the facilities in those buildings was analyzed using conventional data analysis techniques. The data analysis was conducted separately for the Colombo district while the analysis was conducted for all other districts together. Analysis revealed that even though there is access to enter the building and move about in more than 70% of the buildings, sanitary facilities especially built for the disabled can only be seen in 15.79% of the buildings in Sri Lanka.

Key words: Disabled persons, Facilities, Buildings

1. INTRODUCTION

Today it is seen that there are a considerable number of disabled people in our country. This number gradually increased as a consequence of war. Even though these people are not physically capable of engaging in many activities they may be intellectually strong. Therefore, they should be given equal opportunity in social activities. Hence special facilities should be included in especially public places, so that it is convenient for them to fulfill their requirements.

The standard rules on the "Equalization of Opportunities for Persons with Disabilities" were adopted by the United Nations General Assembly at its 48th Session on the 20th December, 1993 [2]. However, the supreme court of Sri Lanka gave a landmark order on the 27th April 2011 about disabled, having access to public buildings [3].

Most of the buildings which were built after introducing the above regulations consist of necessary facilities for the disabled persons. However, as most of the public buildings that are currently in use and are of great importance, have

been built before that, the provision of such facilities in those buildings is still questionable. Therefore, the primary objective of this study is to find out the extent of having necessary facilities for disabled persons in existing public buildings in Sri Lanka. These mainly include public places such as hospitals, markets, banks, libraries and leisure places. Facilities taken into consideration are mainly which are useful for disabled persons to walk into the building, go around and get their work done. Even though, deaf and blind persons are also considered as disabled, the priority of this study was given to those who are capable of getting into the building, move around and can get their work done, if necessary facilities are provided.

2. METHODOLOGY

Facilities required for the disabled persons were categorized into four main categories [1,4,5]. They are;

1. Access to the building
2. Getting into the building (entrance)
3. Move within the building
4. Sanitary facilities

Then a questionnaire for the survey was prepared considering more sub categories within each of the above main categories as shown in Table 1.

Table 1: Facilities considered for the survey

Main facility	Sub categories
1. Access to the building	-level ground or -ramp (if its elevated)
2. Facilities to get into the building (suitable entrance)	-Door with a suitable width -Level threshold (no doorstep)
3. Facilities to move about the building	-Doors with appropriate widths -Corridors with an appropriate width -Lifts (only for multi storied buildings)
4. Separate Sanitary facilities	-Door knobs /switches within the toilets at a lower level -No steps inside the toilet -Cubicles with more space -Handles/ supporters within the toilet

The survey was conducted covering most parts of the country. Districts that were covered are as follows:

Ampara	Kalutara	Pollonnaruwa
Anuradhapura	Kandy	Puttlam
Badulla	Kegalle	Ratnapura
Colombo	Kurunagala	Hambanthota
Galle	Matara	Batticaloa
Gampaha	Monaragala	Matale
Jaffna	Nuwaraeliya	Trincomalee

Important public buildings such as hospitals, banks, markets, libraries, shopping complexes and places for leisure of a main town in each district were chosen and each building was investigated for the above facilities. The date of completion of the building was also noted as the survey was done for buildings which belong to different eras. However, the survey could not be carried out to districts such as Kilinochchi, Vavuniya, Mannar, and Mulativ as there was no access to get data from those districts.

Specially, the survey was expanded for Colombo district considering all the suburban areas in it as it is the district in which both Sri Lanka's commercial

capital, Colombo and the political capital, Sri Jayewardenepura Kotte are located. Furthermore, it has a population of 2,235,000 (2001 census) and has the highest population density of all Sri Lankan districts (3,500 inhabitants/km²) [6].

Areas covered in the Colombo district include,

- Colombo and suburbs (Colombo 1-15)
- Mount lavinia
- Dehiwala
- Nugegoda
- Sri jayawardanapura kotte
- Kalubowila
- Battaramulla
- Gothatuva
- Piliyandala
- Malabe
- Kolonnawa
- Moratuwa

3. DATA ANALYSIS AND RESULTS

A total of 228 buildings which belong to different time periods were examined in each district. Figure 1 shows the percentage of the buildings subjected to the survey in different time periods in all the districts.

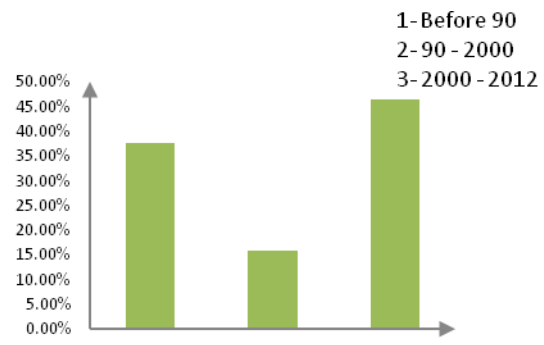


Figure 1: Percentages of the buildings that belong to different time periods

In order to provide more detailed outcome, the data analysis was conducted mainly in two stages. Firstly, the data collected from all the districts including the Colombo district was analyzed together (Analysis 1). Secondly, the data for the Colombo district was analyzed separately (Analysis 2).

However, facilities such as separate parking space, doors that open both ways, access to switches and sockets, hearing and visual aids to communication and enhanced fire alarm systems which were there in the questionnaire, were not included in the analysis as those functions were not available in any of the buildings examined through this project.

Table 2 shows the summary of the results obtained for various districts.

Table 2: Summary of the results for each district

District	No. of buildings covered	Access to the building		Getting into the building(entrance)		Move within the building		Separate toilet facilities	
		Yes	No	Yes	No	Yes	No	Yes	No
Colombo	95	67	28	90	5	84	11	19	76
Kurunegala	8	5	3	8	0	7	1	0	8
Anuradhapura	9	6	3	9	0	9	0	0	9
Matara	6	5	1	5	1	2	4	1	5
Galle	5	5	0	5	0	4	1	3	2
Kaluthara	14	9	5	14	0	10	4	2	12
Kandy	7	3	4	7	0	4	3	3	4
Nuwaraeliya	5	3	2	5	0	3	2	0	5
Badulla	6	5	1	6	0	2	4	1	5
Polonnaruwa	6	6	0	5	1	6	0	0	6
Gampaha	11	9	2	11	0	10	1	2	9
Puttlam	4	3	1	4	0	3	1	0	4
Monaragala	7	2	5	7	0	5	2	0	7
Rathnapura	5	5	0	5	0	5	0	0	5
Mathale	6	4	2	6	0	4	2	1	5
Hambanthota	7	7	0	7	0	6	1	2	5
Jaffna	5	5	0	5	0	4	1	0	5
Trincomalee	7	4	3	7	0	4	3	2	5
Ampara	5	2	3	5	0	2	3	0	5
Batticaloa	5	2	3	5	0	2	3	1	4
Kegalle	5	4	1	5	0	4	1	0	5

3.1 Analysis 1-Overall analysis

Table 3 and Figure 2 show the availability of each facility as a percentage. It shows that around 70.61% of the buildings in Sri Lanka have access for the disabled persons, to the building. More than 95% have suitable entrances for the disabled persons and in 78.95% of the buildings they can easily move within the building and get their work done. However, not even one fourth of the total number of buildings has special sanitary facilities for the disabled persons.

Table 3: Availability of each facility in all districts as a percentage

	Access to the building	Getting into the building(entrance)	Move within the building	Separate sanitary facilities
Overall	70.61%	96.93%	78.95%	15.79%

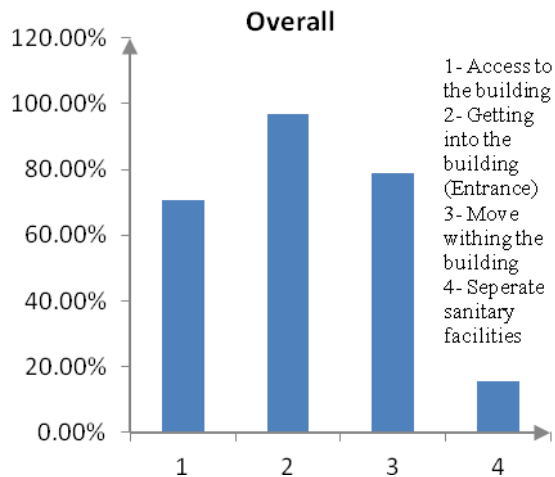


Figure 2: Availability of facilities for disabled persons in public buildings in all districts

3.2 Analysis 2-Colombo District

A total of 95 buildings were examined within the Colombo district. Table 4 shows the availability for the disabled persons. The graphical representation of that is shown in figure 3.

Table 4: Availability of each facility in the Colombo district as a percentage

	Access to the building	Getting into the building (entrance)	Move within the building	Separate sanitary facilities
Colombo	70.53%	94.74%	88.42%	20%

As shown in Figure 3, there is access for the disabled persons to get into more than 70% of the buildings in Colombo District. They can easily enter the building and attend to their work in more than 85% of the buildings. However, similar to that

noted in the Analysis 1, sanitary facilities are available only in 20% of the buildings in the Colombo district.

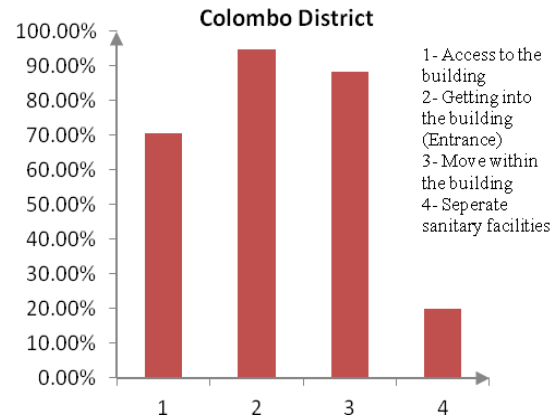


Figure 3: Availability of facilities for disabled persons in public buildings in the Colombo district

4. CONCLUSION

The study indicated that the most of the buildings which have been constructed in Sri Lanka up to now have access to the building, with suitable entrances and suitable interior to facilitate the disabled persons.

However, only a few among them have given thought to sanitary facilities for the disabled persons. Availability of special sanitary facilities is mostly concentrated into hotels and hospitals. However, there are no separate sanitary facilities for the disabled at places like banks and finance companies even though the provision of sanitary facilities in such places is essential.

On the other hand, there are no facilities at all for disabled persons in some of the important building which were built before 2011. This highlights the need to modify such buildings to facilitate the required facilities for the disabled persons.

The research also confirmed that as a result of regulations brought in 2011 about disabled facilities, much attention has been given to include disabled facilities in public buildings designed/constructed after 2011.

Additionally, during the survey it was identified the unavailability of the above facilities is mainly due to following reasons,

- The cost.
Construction of separate sanitary facilities is one of the most costly facilities of the facilities discussed in this paper. In most cases cost is the main reason to exclude separate sanitary facilities for the disabled. Therefore, it would be economical to include the necessary

facilities required for the disabled in common toilets, so that all can use them.

- Lack of knowledge about the necessity of such facilities.

It is in crucial importance to educate the public about the importance of such facilities in order to let the disabled persons join in social activities. This could be done through electronic media, seminars, schools and institutes and also by bringing out rules and regulations in favor of such facilities.

Regulations brought in 2011 about disabled facilities, made it a must to include functions in public buildings which make it convenient for the disabled to enter and attend to their work. Hence much thought was given to such facilities when constructing a building after 2011.

However there are public buildings of importance which were built before the regulations were introduced. Some of those buildings don't have facilities for the disabled at all. The disabled cannot enter those places, nor can they obtain any kind of service from those places. Therefore it is imperative to introduce such facilities to these buildings.

5. REFERENCES

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