



**RECOMMENDATIONS TO MAKE VEDANTHANGAL BIRDS SANCTUARY A**

**DISABLED FREINDLY TOURIST SPOT**

**BY**

**SUKRITI SOCIAL FOUNDATION**

**TO**

**THE TAMILNADU FOREST DEPARTMENT**

**ON**

**12.7.2006**

## **ABOUT US**

***SUKRITI SOCIAL FOUNDATION*** is a Chennai based Non Governmental Organization that cares and rehabilitates the disabled. It was registered as a Trust on 1.3.2006 to work for the upliftment of the disabled. Sukriti works for the visually impaired, hearing impaired, persons with loco motor disability, mentally ill and the mentally challenged. Sukriti rehabilitates them by providing assistive devices like calipers, crutches, artificial limbs, tri wheelers, white canes and hearing aids. Sukriti caters to the needs of the disabled from the economically challenged families.

## ***VISION***

The vision of Sukriti is a society where there is equal opportunity for the disabled and where they can live with dignity and self respect. Sukriti is taking a strong role in lobbying for the rights of the disadvantaged disabled in order to improve their quality of life.

## ***MISSION***

- ◆ PREVENTION OF DISABILITY
- ◆ DISTRIBUTION OF ASSISTIVE DEVICES TO THE DISABLED
- ◆ EDUCATION AND TRAINING
- ◆ RESEARCH AND ADVOCACY

## ***BACKGROUND AND PERSPECTIVE***

Its Sukriti's endeavor to ensure a barrier free environment –be it in schools, colleges, offices, cinema halls or any tourist spot. Barrier-free environment enables people with disabilities to move about safely and freely, and use the facilities within the built environment. The goal of barrier free design is to provide an environment that supports the independent functioning of individuals so that they can participate without assistance, in every day activities. Therefore, to the maximum extent possible, buildings/ places/transportation systems for public use will be made barrier free. In the recent years, there have been vast and positive changes in the perception of the society towards persons with disabilities. It has been spelt out clearly in the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act , 1995 , a barrier free environment is essential to facilitate the disabled. It has been realized that a majority of persons with disabilities can lead a better quality of life

if they have equal opportunities.

Tourism is a means of broadening horizons and developing friendships. But in India we invariably see that all tourist spots are anything but disabled friendly. Travel experiences are characterised by transportation constraints, inaccessible accommodation and inadequate customer service. The disabled travellers needs are never considered by anybody whereas travelling is their right too.

Pursuing our effort to make the beautiful Vedanthangal bird sanctuary a disabled friendly tourist spot, we are presenting our recommendations here.

### ***BARRIERS IN THE EXISTING INFRASTRUCTURE :***

1. There are a fleet of steps at the entrance
2. The side wall has very slippery tiles which one can not hold for support
3. There is a threshold( a small step) at the viewing spot
4. Wheel chairs are not available at the spot

### ***STEPS TO BE TAKEN TO REMOVE BARRIERS:***

1. Construction of a slope ramp.
2. Construction of a kerb ramp at the viewing spot
3. Provision of wheel chairs at the spot

### ***CONSTRUCTION OF A SLOPE RAMP***

A ramp is an inclined way connecting one level with another. Ramps play a very important role in enhancing the accessibility of buildings. They need to be designed with great care. Many times we see that ramps have been constructed but they are of no avail as either they are too steep or too narrow or just not safe. In order to ensure that such mistakes are not committed we are throwing light on this subject.

*The following points should be kept in mind while building a ramp:*

- The slope and the length of the ramp are very important. Ideally 6 degrees slope and length of less than three meters would be suitable. If it is not possible to construct a single ramp to respect this limitation in slope and limitation in length, you can make a ramp with more than one run.

- The surface of the ramp must be made of a rough and non-skid material.
- Keep adequate landing space at the start and the end of every ramp.
- If the ramp is more than three meters long, split it into a ramp with more than one run. Each run should not be longer than three meters. Ensure that there is adequate landing space at each end of each run of the ramp. This landing space is necessary in case the person wants to stop and take rest, or wants to turn back and return midway.
- For ramps longer than 1 m, hand rail is essential. The hand rail is also useful as a protective barrier, to avoid falling off the ramp.

***TO HELP ESTABLISH THE PROPER RAMP LENGTH:***

1. Measure the distance from the top step or landing to the ground. This is the RISE.
2. Refer on the chart. Find the proper rise on the left. Then, move to the right until you come to the proper degree of incline. The suggested length of the ramp you will need will be at the top of the column. You may also use a ramp longer than your suggested length.

**RAMP LENGTH**

	2'	3'	4'	5'	6'	7'	8'	10'
	24"	36"	48"	60"	72"	84"	96"	120"
3"	7.2°	4.8°	3.6°	2.9°	2.4°	2.0°	1.8°	1.4°
4"	9.6°	6.4°	4.8°	3.8°	3.2°	2.7°	2.4°	1.9°
5"	12°	8.0°	6.0°	4.8°	4.0°	3.7°	3.0°	2.4°
6"	14.5°	9.6°	7.2°	5.7°	4.8°	4.1°	3.6°	2.9°
7"	17°	11.2°	8.4°	6.7°	5.6°	4.8°	4.2°	3.3°
8"		12.8°	9.6°	7.7°	6.4°	5.5°	4.8°	3.8°
9"		14.5°	10.8°	8.6°	7.2°	6.2°	5.4°	4.3°
10"		16.1°	12.0°	9.6°	8.0°	6.8°	6.0°	4.8°
12"			14.5°	11.5°	9.6°	8.2°	7.2°	5.7°
14"			17.0°	13.5°	11.2°	9.6°	8.4°	6.7°
16"				15.5°	12.8°	11.0°	9.6°	7.7°
18"					14.5°	12.4°	10.8°	8.6°
20"					16.1°	13.8°	12.0°	9.6°
22"						15.2°	13.2°	10.6°
24"						16.6°	14.5°	11.5°
26"							15.7°	12.5°
28"							17.0°	13.5°
30"								14.5°
32"								15.5°
34"								16.5°

***TO ESTABLISH PROPER SLOPE OF RAMP***

VERTICAL RISE(in mm)	MAXIMUM GRADIENT
0.0 to 15.0	1 : 2
15.1 to 50	1 : 5
50.1 to 200	1 : 10
Exceeding 200	1 : 12

### ***WIDTH***

The minimum clear width of the ramp should be 1200mm so that there is adequate space to turn around.

### ***SURFACE***

1. Ramps and landing surface should be slip resistant
2. Ramps should be designed to prevent water from accumulating on the walking surface
3. The surface should be made of anti skid material like clay tiles

### ***LANDING***

1. Ramps should have a level landing at the top and bottom.
2. Landing should have a level platform of not less than 1500mm

### ***HANDRAILS***

Handrails are extremely important features and must be designed to be easy to grasp and to provide a firm and comfortable grip so that the hands can slide along the rail without obstruction as many people even without disability depend on handrails to maintain balance or prevent serious falls.

#### Hand rails -

1. Should be provided at both the sides of the ramp
2. Be slip resistant with round ends
3. Have a circular section of 30-40mm in diameter
4. Be free of any sharp or abrasive elements
5. Have continuous gripping surfaces without interruptions or obstructions that can break a hand hold
6. Be continuous even in the landings
7. Extended at least 300mm beyond the ramp at both at the top and bottom to provide support for persons who need help to negotiate the ramp

8. Not project into another path of travel
9. Have a clear space of 40mm from the wall
10. Be installed at a height of 800-900mm

### ***EDGE PROTECTION***

Ramps not adjacent to a wall should have an edge protection such as

1. A curb(a side barrier) with a minimum height of 75mm
2. A raised barrier with its lower edge not less than 75mm from the ramp
3. A rail with the bottom edge not more than 75mm from the ramp

### ***KERB RAMP AT THE VIEWING SPOT***

1. A kerb ramp should be provided at the viewing spot as the vertical rise or fall in this case is below 150 mm.
2. The gradient of a kerb ramp should not be steeper than 1:10
3. Width should not be less than 900mm
4. Kerb ramps do not require hand rails
5. Kerb ramps should have flared sides where pedestrians can walk across
6. Should be designed to prevent water accumulation on the walking surface

### ***PROVISION OF WHEEL CHAIRS AT THE SPOT***

Wheel chairs should be provided at the spot as it's very difficult to carry a wheel chair. In public places it's generally seen that the wheel chairs are not properly maintained They are also subject to rough use by the public. The following points should be kept in mind while ordering a wheel chair for public use:

1. Should be very sturdy
2. Should be given anti rust coating
3. The tyres should be tubular so that pressure is always maintained
4. The dimensions should be 1200mm(length) by 680mm(width)
5. Quality should not be compromised for cost

### **WHEEL CHAIR SUPPLIERS**

- VISSCO REHABILITATION AIDS PRIVATE LTD

(Manufacturers of high quality wheel chairs)  
517, TULSIANI CHAMBERS  
NARIMAN POINT  
MUMBAI-400021  
PH 22-22840682

- CALLIDAI MOTOR WORKS P LTD  
(Manufacturers of quality wheel chairs)  
28, DESIKACHARI ROAD  
MYLAPORE  
CHENNAI-4
- MOHANA ORTHOTICS CENTRE  
(Manufacturers of quality wheel chairs)  
No 154, MTH ROAD  
VILLIWALKAM  
CHENNAI -49

### ***AFTER REMOVAL OF BARRIERS***

Once the barriers have been removed and the ramp has been constructed it's needed to publicise this so that more disabled tourist both Indian and International would be attracted.

SWAGAT-Welcome the disabled tourist

SOOCHNA- Provide information to the public through the print media and the visual media about the facilities available at the spot for the disabled. Prominent signpost should be put at the spot about the availability of wheel chairs

SUVIDHA-Make the facilities actually available

SURAKSHA- Ensure safety of the disabled tourist by maintaining wheel chairs and the ramps

### ***CONCLUSION***

Its amazing to see how birds in thousands flock here from as far as Siberia and Australia. But the disabled person next door does not have opportunity to enjoy this nature's beauty. With these recommendations being implemented Vedanthangal bird sanctuary would probably be the first bird

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sanctuary in India to be made disabled friendly.

## REFERENCES

1. Planning a barrier free environment published by the Office of Chief Commissioner for Persons with Disabilities

2. Web resources

[www.shellclub.tripod.com](http://www.shellclub.tripod.com)

[www.rehabilitationcouncil.nic.in](http://www.rehabilitationcouncil.nic.in)

[www.ccdisabilities.nic.in](http://www.ccdisabilities.nic.in)

[www.uae.org.uk/sheets/ramps.html](http://www.uae.org.uk/sheets/ramps.html)

Pictorial presentation of a ramp:

