

"Dedicated to the Sanitation Campaign of Nepal"

Options on Household Toilet Facilities for People with Disabilities and Difficulties



National Water Supply and Sanitation Training Center
Department of Water Supply and Sewerage

Supported by:



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Message

The Government of Nepal (GoN) has given importance to sanitation and hygiene since many years and recognises the harmful impacts of open defecation on human health and dignity and the environment. The Constitution of Nepal further affirms sanitation and hygiene as a basic human right. Progress in access to sanitation has been rapid and the country is on track to achieving Open Defecation Free status by the end of 2017.

The Sustainable Development Goals (SDGs) and national sector plan and policy documents being devised now provide a roadmap for the sector for the coming years and envisions “safe, sufficient, accessible, acceptable, and affordable” WaSH services “anytime, for everyone, and everywhere”. This follows the SDG’s aim of achieving access to adequate and equitable sanitation and hygiene for all, with a focus on vulnerable groups, by 2030 (Goal 6.2). Therefore, it has become increasingly important to focus on people

with disabilities and make sure they are not left behind in having convenient access to sanitation.

This handbook will guide communities and supporting agencies on how to make sanitation facilities for people with different types of disabilities in the context of Nepal’s rural areas. I would like to congratulate the National Water Supply and Sanitation Training Centre (NWSSTC) for taking lead to bring in light this practical guide that will support people with disabilities and temporary difficulties to access and use toilets comfortably.

I would like to acknowledge SNV Nepal and its team for their financial and technical support in developing this handbook.

I hope the handbook serves as a reference document to help Nepal progress towards sanitation coverage for all.



Mr. Tej Raj Bhatt

Director General

Department of Water Supply and Sewerage

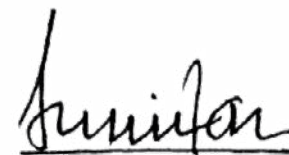
Message

I am pleased to know that National Water Supply and Sanitation Training Centre (NWSSTC) is bringing forward this important handbook that can support the communities and sector agencies engaged in sanitation, especially in toilet building. Practically, the Government has defined the next milestone of total sanitation and the Department of Water Supply and Sewerage (DWSS) is working with WaSH stakeholders for achieving total sanitation behaviours in ODF declared communities. Among the six focus areas of total sanitation, the use of a toilet by all, at all times is a major indicator. This target can however only be achieved if all members of a household, including people with disability (PWD) or people who have temporary difficulties such as pregnant women, sick people, the elderly, etc. can access and use a toilet. In reality, this means that families may need to make adjustments to their toilet so that

everyone in the home can use it conveniently. The key challenge is to overcome the perception that making such toilets is expensive or difficult to do.

I found that this handbook has been thoughtfully developed to provide an illustrative guide on how to make a suitable pathway to a toilet and features inside a toilet to help people with disabilities and difficulties to use a toilet.

I would like to extend my sincere thanks to all those who were involved in developing this handbook, especially, the SNV team working on it and the members of the National Sanitation and Hygiene Coordination Committee for their inputs and feedback in finalising this document.



Er. Sunil Kumar Das

Deputy Director General
Department of Water Supply and Sewerage

Acknowledgement

Progress in access to sanitation has been highly satisfactory and Nepal is on the path and nearing to achieving Open Defecation Free (ODF) status by the end of 2017. Still, there are questions on how sanitation need at public places would be addressed? What about access to and usage of sanitation facilities and services by the vulnerable section of the population, i.e. people with disability, children, aged people and the half of the population- especially the menstruating women?

This handbook has been the result of the efforts of WASH stakeholders of Nepal and organisations working with and representing peoples with disabilities (PWDs) and is intended to guide communities and supporting agencies on how to make sanitation facilities for PWDs in the context of rural Nepal. It has been developed in line with the basic requirements laid down in the 'Accessible Physical Structure and Communication Service Directory for People with Disabilities'.

The technological options shown can be easily installed by households themselves or local service providers. All options shown in the handbook have been verified through sharing and feedback sessions with people with disabilities in eight districts of Nepal (5 terai, 2 hill, and 1 mountain district). This handbook can be used by sanitation promoters, health personnels, organisations working with persons with disabilities (PWDs), and service providers.

I would like to thank the entire team of SNV Nepal and its Sustainable Sanitation and Hygiene for All (SSH4A) programme implemented with funding from Department for International Development (DFID), UK, Department of Foreign Affairs and Trade (DFAT), Australia, and the Ministry of Foreign Affairs (DGIS), the Netherlands for their financial and technical support in developing this handbook.

NWSSTC will appreciate any critical feedbacks on it.



Er. Kabindra Bikram Karki

Director,
Department of Water Supply and Sewerage
National Water Supply and Sanitation Training Centre

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1. INTRODUCTION

1.1 Rationale

The sanitation movement in Nepal aims at achieving “open-defecation-free” status of the country by 2017. Important next steps include sanitation access “for all, at all times”. The present toilet structures and pathways to toilets do not consider the needs of people with disabilities (PWDs) or other difficulties and are a major obstacle in achieving universal sanitation access. The Government of Nepal has issued accessibility and communication guidelines on improving access for PWDs in public places and institutions. These guidelines are however not adequate to address sanitation access challenges at the household level. Therefore, this handbook has been developed with the aim of providing information on practical options that can be readily implemented by households having family members with disabilities or facing difficulties in accessing and using toilets. It has further been practically validated through engagement with Women and Child Offices, other organisations working with PWDs, and people living with different types of disabilities in Banke, Dailekh, Kalikot, Mahottari, Salyan, Saptari, Sarlahi, Siraha, Surkhet districts. It is hoped that these facilities can be built or adapted with minimum cost, using local materials.

1.2 Target audience

The handbook is intended to be used by field staff, health extension workers, female community health volunteers (FCHV), social mobilizers, sanitation technicians and masons involved in the promotion of sanitation and hygiene in the rural areas of Nepal. The handbook can be used to raise awareness about challenges in access and guide people on how to build or adapt toilets for family members with disabilities or facing difficulties in using toilets.

1.3 Types of disabilities and difficulties

People with disabilities include 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 (UN Convention on the Rights of Persons with Disabilities). People facing challenges in accessing and using toilets can be placed in four main categories:

- Physically impaired
- Visually impaired
- Sick people
- Pregnant women

1.4 Site selection

- Toilet should be constructed near the house
- Ground leveling must ensure safe and convenient access up to the toilet
- Toilet should not have a slippery pathway
- Hand washing station should be accessible
- Sufficient space should be available for implementing required measures.

2. TOILET FACILITY OPTIONS

2.1 Access to toilet

2.1.1 Ramp

Suitable: For wheelchair use, people having walking difficulties



Features:

- Size of toilet floor (inside): 8 ft x 7 ft 6 inches, in order to have enough space to park a wheelchair
- Door size: 3 ft 3 inches width, should open outwards
- Door latch from inside and handle from outside: at 2 ft 6 inches height from bottom of floor
- Slope of ramp: shallow slope, 1:15 (1 ft height for every 15 ft length)
- Width of ramp: 3 ft
- Size of platform: 5 ft x 3 ft
- Ramp finishing: textured (should not be smooth and slippery)
- Ramp support: side handrailing with a height of 2 ft 3 inches – 3 ft
- For upgrading an existing toilet, the platform can be made bigger (minimum size: 5 ft 9 inches x 5 ft 9 inches) to be able to park a wheelchair outside the toilet door (not illustrated)

2.1.2 Walking pathway

A. Course sand pathway with stone kerb

Suitable: Visually impaired people



Features:

- Materials: course sand for pathway and small boulders for kerb
- Kerb height: less than 4 inches
- Pathway finishing: smooth, without sharp stones
- Pathway should be made as straight as possible
- Pathway needs regular maintenance to align the kerb and remove obstacles from the pathway
- Keeping light at pathway will help low vision people at night time (not illustrated)
- Pathway can also be used with a toilet having steps (not illustrated)

B. Rope railing

Suitable: Visually impaired people, not suitable for people having walking difficulties



Features:

- Materials: nylon rope, thickness of 1 inch
- Railing height: 2 ft 3 inches - 3 ft
- Rope should be visible to all and bright in colour
- Rope needs to be checked regularly for stiffness
- Keeping light at pathway will help low vision people at night time (not illustrated)
- Rope railing can also be used with a toilet having steps (not illustrated)

C. Bamboo or wooden railing

Suitable: Physically impaired people, people having walking difficulties



Features:

- Materials: bamboo or wood
- Railing height: 2 ft 3 inches – 3 ft
- Bamboo or wood material should not have any sharp edges
- Railing needs regular checking and maintenance
- Keeping light at pathway will help low vision people at night time (not illustrated)
- Railing can also be used with a toilet having steps (not illustrated)

2.2 Facilities for toilet use

2.2.1 Handles

A. Handles on side wall

Suitable: Physically impaired people, people having walking difficulties, pregnant women, sick people

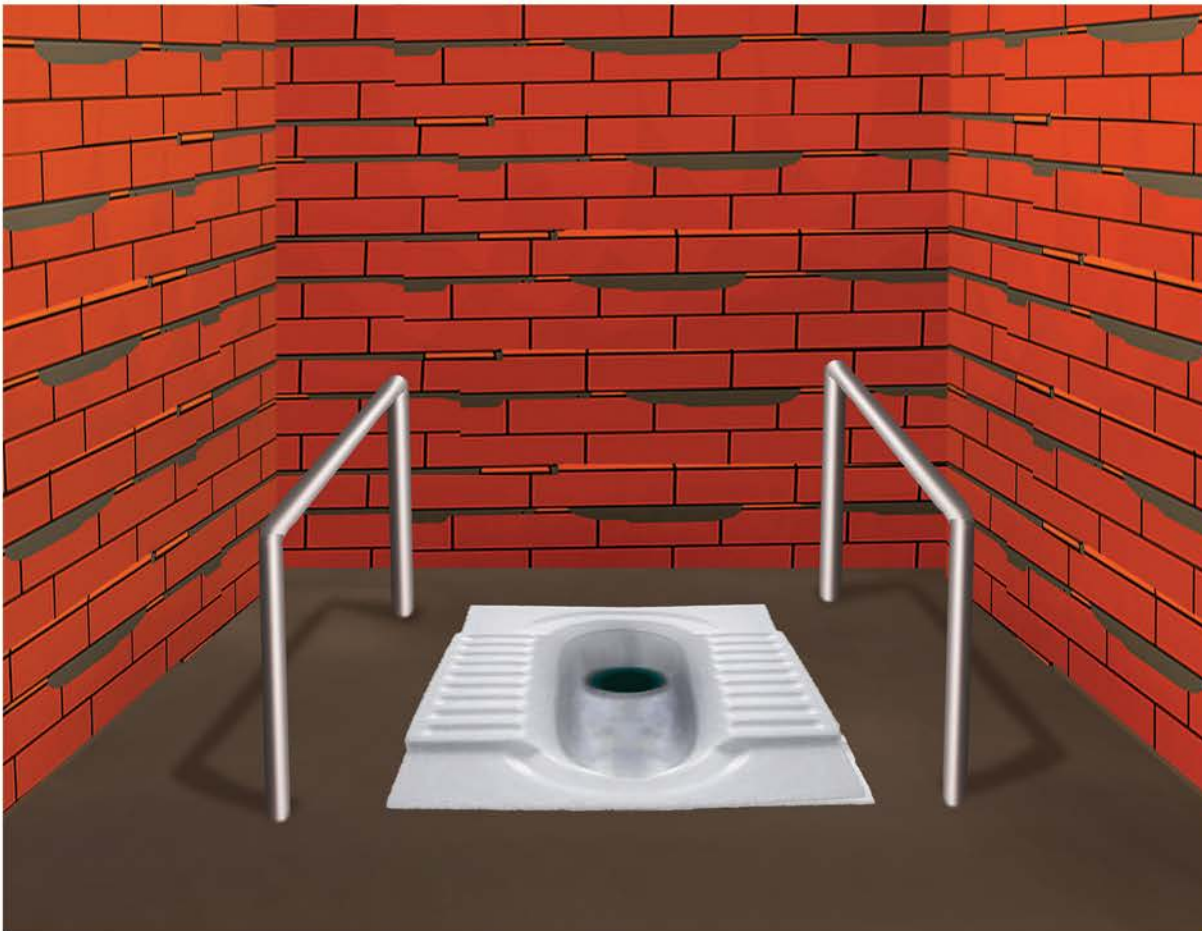


Features:

- Materials: iron pipe or rod
- Handle height: varies based on height of users, but should not be more than 2 ft 6 inches
- Gap between the wall and handle: should not be more than 8 inches (for 4 ft x 3 ft 6 inches toilet room)
- More than one handle can be fixed on one wall as per need of users (not illustrated)
- Handles should be fixed on a permanent wall (brick or stone joined by cement mortar)

B. Handles on floor

Suitable: Physically impaired people, people having walking difficulties, pregnant women, sick people

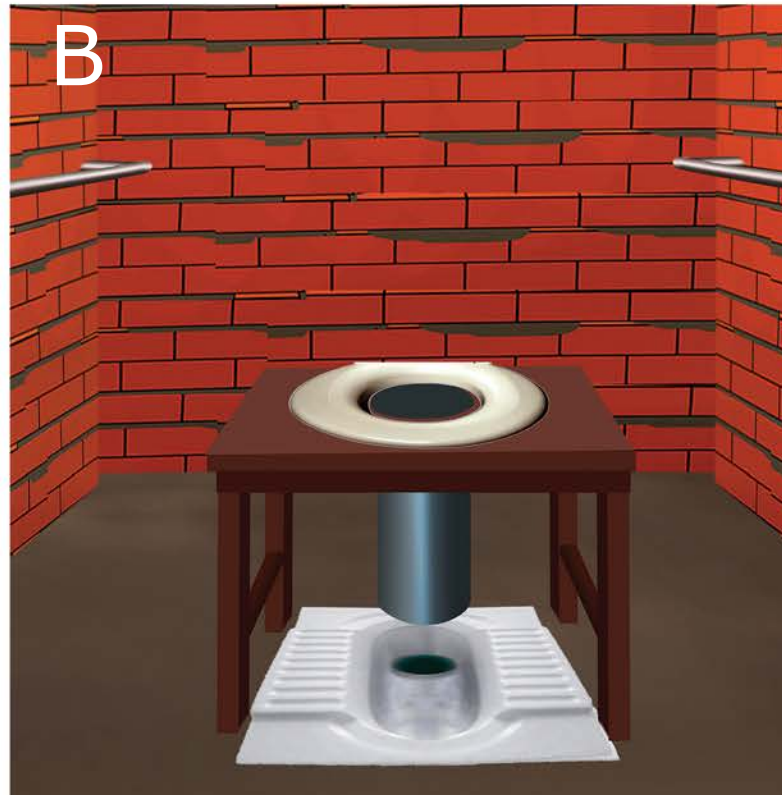
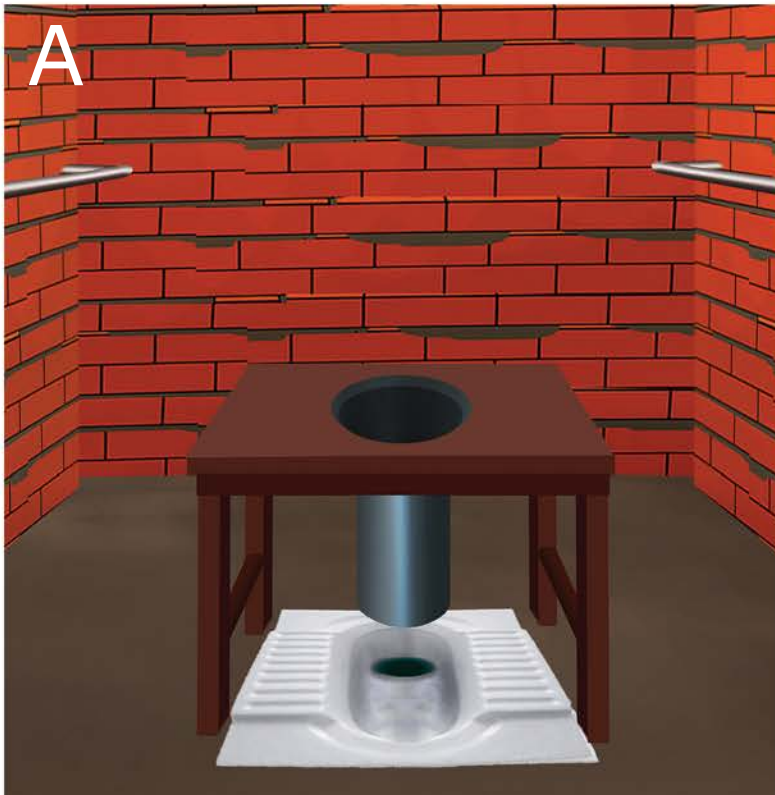


Features:

- Materials: metal pipe, bamboo, or wood
- Handle height: varies based on height of users, but should not be more than 2 ft 6 inches
- Handles made from bamboo or wood need regular maintenance because of rotting at base

2.2.2 Seating facilities

Suitable: Physically impaired people having walking difficulties, pregnant women, sick people



Features:

- Can be made from locally available wooden stool or chair
- Metal or plastic pipe can be fixed under the stool to guide faeces towards the pan
- Stool and pipe need regular cleaning with brush and water
- Seat of a commode can be added to make sitting more comfortable (illustration B)
- Stool or chair can be placed easily above the pan at time of use
- Ready-made chair with a removable excreta collection pot is available in the market (illustration C)

2.3 Cleansing facilities inside toilet

2.3.1 Water bucket and mug in raised platform

Suitable: Physically impaired people, pregnant women, sick people



Features:

- Permanent platform from brick and cement can be constructed inside the toilet to keep a water bucket and mug
- Wooden stool can be used as a platform (not illustrated)

2.3.2 Water bucket placed on the wall and connected with hose pipe

Suitable: Physically impaired people, pregnant women, sick people



Features:

- Bucket can be placed on a sturdy wooden stand fixed to the wall
- Wooden stand should be fixed on a permanent wall (brick or stone joined by cement mortar)
- Water tap (0.5 inch) should be fixed to the bucket
- Hose pipe (0.5 inch) should be connected to the tap
- Height of the tap stand should be reachable to a person sitting on the toilet chair
- Commode spray can be used for cleansing (not illustrated)

3. REFERENCES

1. Centre for Accessible Environment. (2004). Design guidance- Steps and stairs.
2. GoN. (2069 B.S.). Accessible infrastructure and communication services guideline for people with disabilities (Nepali language). Nepal.
3. Jones, H. & Reed, R. (2005). Water and sanitation for disabled people and other vulnerable groups. Loughborough, UK: WEDC, Loughborough University.
4. NEWAH. (2004). Making latrine user friendly for everyone- An exploratory research study on discomfort faced by pregnant women, elderly, overweight, sick, and disabled people when using squat latrines. Nepal.
5. Wilbur, J. & Jones, H. (2014). Frontiers of CLTS: Disability- Making CLTS fully inclusive. WEDC and Water Aid.

