24 Creating user-friendly water and sanitation services for the disabled: The experience of WaterAid Nepal and its partners

### Anita Pradhan and Oliver Iones

WaterAid in Nepal

### Abstract

Traditional attempts to increase coverage of basic services such as water and sanitation have marginalised or excluded the needs of disabled people. This is despite the fact that some 10% of the Nepali population, including one in six poor people, can be considered to have some kind of impairment. This paper reviews the social, technical, financial and policy barriers to meeting the needs of disabled people. It considers the consequences of this neglect on health, dignity and economic and social exclusion, and especially the impact on women. The experiences of WaterAid Nepal and its partners in supporting differently-able people without access to water and sanitation are set out and solutions to overcome the barriers are put forward. The

document concludes by recommending improved coordination and collaboration in the sector to increase focus on and improve delivery of water and sanitation services to disabled people.

### Background

WaterAid Nepal (WAN) has been working in the water and sanitation sector since its establishment in 1987. It has supported more than 800 rural and 100 urban communities in accessing water and sanitation services. WAN has included a Gender and Social Inclusion Approach within its water and sanitation projects to ensure the active participation and inclusion of people of different economic and social status.

People facing disability are a part of every community throughout the world. Assessments have clearly shown a correlation between the poorest section of society and disability, with the prevalence of impairments found to be highest amongst the poorest section of society. With one out of every

six poor people likely to have some form of impairment, almost every poor family is likely to contain a person with a physical impairment. It is estimated that there are about 2.4 to 2.5 million people living with impairments in Nepal, which is about 10% of the total population.

This document has adopted the so-called "social model of disability" in its analysis, in which disability is considered the responsibility of the whole of society. In this model it is understood that people with impairments, such as physical impairments that limit their activity, are disabled because of the social and economic environment in which they live, which does not allow them to engage in society in the same ways as other people.

Poverty and disability are intrinsically linked, with disability being both a cause and effect of poverty. The poorest sections of society are more likely to have poor nutrition, limited health services, environmental pollution, unsafe water, and poor hygiene and sanitation, all of which place people at increased risk of some form of impairment. A very prominent example of this is polio, which is caused by a water-borne virus, and is a major cause of physical impairments. In most developing countries those people living with a specific impairment are more likely to be unable to access adequate healthcare and treatment, and as a result are disabled. They find themselves excluded from education and employment, and are thereby trapped in the vicious circle of poverty.

## Addressing the needs of the physically impaired

The Government of Nepal believes that the Millennium Development Target (MDT) for water is on track but the statistics used to demonstrate

this ignore issues such as the reliability and safety of sources. Nepalese sanitation coverage targets are ambitious, particularly the national goal to achieve 100% sanitation coverage by 2017, and there is little dispute that sanitation targets are still far away. Access to water and sanitation services is a fundamental right of all people whatever their gender, physical ability, economic status or age. Therefore all water and sanitation programmes need to address the needs of all sections of society, including those living with impairments. Although the MDTs can mostly be achieved through the provision of water and sanitation to more privileged groups, in WAN's opinion the true success of the MDTs will not just be providing services to people, but reaching out to the poorest, marginalised and most vulnerable sections of society.

Reducing the disability of people living with impairments through addressing their needs in accessing basic water and sanitation services has been long overlooked, resulting in their continued isolation, poor health and poverty. Although some specialist agencies have taken initiatives to address these groups' concerns over water and sanitation needs, there is much to be done to include them in water and sanitation activities and ensure they have adequate access. Clearly, there is an urgent need to build awareness and knowledge in this area for every development practice.

Disabilities among people are diverse, as is their nature and impact on people's daily lives. People with impairments can be defined as those with no or limited physical, sensory (vision or hearing) or cognitive (learning) functionality, as a result of which they face reduced opportunities to participate in family and community activities. Elderly people,

pregnant women and children may also have specific impairments and resulting needs when accessing water and sanitation services, but do not consider themselves disabled. There is, then, a need for a broader perspective on access to water and sanitation, which also includes people who do not identify themselves as disabled but have varying abilities — "differently able".

There is no question that innovative designs using local materials, a little extra cost, and simple considerations can aid disabled people to take care of their personal hygiene needs independently. Since 2004, WAN and its partners have been engaged in developing appropriate tools and technologies to build awareness on these issues, to ensure active participation of disabled people in the water and sanitation sector and to increase their access to water and sanitation services. WAN's experiences to date have shown that increased access to user-friendly water and sanitation services has resulted in improved health and hygiene among disabled people, their family and their community. In fact we are sure that the provision of these basic services to differently-abled people has had greater positive impact on their lives than the provision of services to able-bodied people.

# Barriers that impede the use of water and sanitation services by disabled people

In Nepal, especially in remote rural areas, where professional medical support and equipment is often difficult to access, little can be done to cure or improve the psychical or mental conditions of physically-impaired people. However, a little consideration while constructing basic services, such as water and sanitation facilities, can have a huge impact on the lives of physically-impaired people

and reduce the disability they face in daily live. Barriers disabled people face when accessing water and sanitation services can be broadly classified into social and technical barriers. In addition to these, the lack of implementation of existing disability policies and financial difficulties within families and communities also create major hindrances in meeting the water and sanitation needs of the physically-impaired.

### Social barriers

Disabled people face social stigmas and exclusion resulting from limited knowledge and understanding of the causes of their impairments and resulting disabilities. In Nepal, people often associate disability from birth with activities in a previous life. Those who have little contact or experience of interacting with people with impairments often have the most negative perception of them. As a result disabled people may be prevented from using public water and sanitation services for fear of "contamination" of water or "dirtying" the facility. Negative attitudes are also held by families who perceive a disabled person within their family as a financial and social burden.

Social stigmas often result in disabled people facing limited access to education, as due to their impairment there is a perception that they do not need or will not benefit from education. We have seen evidence that this has a negative impact on their ability and opportunities to participate and influence crucial decisions concerning their basic rights, such as those related to the design and provision of water and sanitation services. Even the seemingly ordinary custom of where possible building a latrine some distance from the house

makes it difficult for the physically-impaired to use the facility.

### **Technical barriers**

Lack of knowledge about available water and sanitation infrastructure designs and technology has a direct impact on disabled people's access to water and sanitation services and also raises safety issues. For example, the steep and terraced terrain of the hills and mountainous regions of Nepal means physically-impaired people find it hard to move without help, and support tools such as wheelchairs are redundant. The natural environment and a lack of proper planning mean the approach paths to water and sanitation services are often slippery, narrow or uneven, making it hard to pass, especially for people using a wheelchair. The lack of support or handrails makes accessing water and sanitation services hazardous for the physically-impaired. Often the height of the wall surrounding a well or a tap also determines whether a physically-impaired person can use it.

This is especially true in public water and sanitation facilities, which do not consider the wide range of users trying access these services. For example, most schools do not have toilets that are friendly to the physically-impaired, which discourages children with different impairments from attending school and hinders their ability to pursue higher studies, often compounding their marginalisation within society. Lack of knowledge of designs and available technology often results in latrines and water points being built without consideration for different users' needs.

### **Financial barriers**

Financial difficulties within families and communities hinder water and sanitation access in general, and

especially for those households who have to make additional investments to ensure access. Even though it often costs only marginally extra to ensure that services are disabled-friendly, it is generally the last in the list of priorities for families and communities that are already financially challenged. The low income of many people in Nepal and the competing expenditure demands within a household mean few resources are allocated to sanitation. When a poor family has to choose between food and sanitation, the latter receives low or no priority. For the poorest of the poor, incurring extra expense for a disabled member of the household is often out of the question.

Although with sufficient technical knowledge low-cost options are possible, our experience shows that all too often without external support or cost-sharing options, modifying water and sanitation services is too great a financial burden on families with disabled members. Even when technical knowledge is present, the financial burden is often further compounded by a lack of locally available and affordable materials, especially in remote hill communities, to construct and maintain appropriate infrastructure. Imported materials and technologies are often too expensive, difficult for communities to access and in the long run unsustainable.

There is a common misconception that making services accessible to people with a variety of different needs is costly. The increased benefits to carers, and society as a whole, of a wide range of people having independent access to water and sanitation services are also often overlooked. Despite sanitation's public benefits and society's overall responsibility to address disability amongst it members, limited resources are allocated at the community level to meet disabled people's needs and thus ensure universal water and sanitation access. Without providing user-friendly

latrines for differently-able people, achieving open defecation free status in a community is not possible. If sanitation outcomes are to be achieved at a community level then inclusion and investment in all groups is essential.

## Barriers created due to lack of implementation of existing disability policies

The right to equality is enshrined in Article 13 of Part 3 of the current Interim Constitution of Nepal, which stipulates that everybody is deemed equal before the law. Based on the concept of equity, the article allows special provisions for the protection and promotion of the rights of marginalised groups, women and differently-able people.

Under Chapter 4, Article 26 proposes special provisions with regard to health, education and social security for the protection and development of disabled people. Many acts, like the Child Act 1991, the Disabled Protection Welfare Act 1982 and the Disabled Protection and Welfare Regulation 1994, have been put in place to safeguard the interests of disabled people. Though appropriate policies are in place, often they are not implemented, leaving disabled people unable to use their fundamental rights. As a result, people living with disabilities do not have equal access to public services – a right that is guaranteed by the Universal Declaration of Human Rights.

## Major consequences of the barriers

### Health risks

There is a direct link between health and access to water and sanitation services. Unsafe water can carry numerous serious diseases, including cholera and typhoid, but the most common are diarrhoea

and worms. In Nepal, diarrhoeal diseases result in 33,000 preventable deaths each year, of which 28,000 are children (DFID, 1998). In Asia, the promotion and adoption of safe sanitation and proper hygiene practices are recognised as having a significant impact on health.

Impairments, especially physical ones, can both increase a person's susceptibility to disease and make maintaining appropriate levels of hygiene more difficult. For example, a physically-impaired person who moves by crawling runs a high risk of obtaining infections in their hands. The negative impact on health and hygiene of not washing ones hands at critical times is well recognised; for disabled people whose access to water is limited. maintaining such a habit is close to impossible. Our experience has show us that in times of high water scarcity, when less water is available and the time taken to collect it is considerable, the water requirements of the disabled are not prioritised. This is because people perceive their inactivity results in less need for washing and drinking water. This perception is of course wrong and can have a considerable negative impact on both hygiene and health.

The lack of a latrine or an inappropriately-designed latrine can place increased stress on a physically-impaired person's body. Although many physically-impaired people's bodies compensate for their impairment with strength in other parts of their body, additional stress while collecting water or defecating can have a significant impact on their ability to perform these or other tasks in the future. In addition, the chances of a disabled person obtaining infections are much higher when using latrines that are not suitably designed for them. It is well recognised that to ensure positive health

impacts the practice of open defecation must stop in the whole community. One household or individual who continues to defecate in the open continues to place the whole community at risk of disease. It is therefore in the health interests of the whole community to ensure that differentlyable people have access to and use sanitation facilities, to ensure that they do not pollute the environment and shared water sources.

### Lost opportunities and deteriorating self-dignity

In this context, by lost opportunities we are referring mostly to the inability of disabled people, as well as their families, to make financial gains and social progress. Public facilities like schools, hospitals and government offices still lack water and sanitation services that address the needs to differently-able people and this has a direct impact on these people's opportunity to make progress in life. Disabled children, especially girls, are excluded from attending school because of a lack of appropriate latrine facilities. This is also the case for adults in places of work where inappropriate water and sanitation facilities hinder their access to these basic rights, meaning fewer disabled people are present in the workforce.

"Most restrooms in almost all offices, including those in government offices, are not friendly to physically-impaired people. Most of the restrooms are made for physically fit people only. Even the Health Ministry, which disseminates messages to people to build toilets, has not been sensitive towards making physically-impaired friendly toilets. None of the rest rooms among 12 in the Ministry are physically challenged-friendly." (Rijal, 2005)

Relying on a carer to use sanitation facilities adds to the burden of disabled people's families in terms

of time and resources. In such situations, it is not only the disabled person who loses opportunities for progress but also the carer, usually a family member. Having to rely on others to maintain personal hygiene, mostly a very private matter, results in the development of low self-esteem. On the other hand, if disabled-friendly water and sanitation services are available the increased independence leads to increased dignity and self-reliance for disabled people. We have witnessed that increased independence can empower a person to take more challenges and rely less on others.

We consider that the economic costs of excluding differently-able people from sanitation far outweigh the costs of including them. The costs of exclusion are borne not only by the family, but also by the whole community, in terms of lost economic and social opportunities.

### Additional burden on women

The challenges faced by differently-able women and girls are even greater than those of differentlyable men. Girls are required to play a much more significant role in day to day household management, such as fetching water and firewood, looking after domestic animals and cooking. The very psychical nature of many of these tasks makes it impossible for girls with impairments to perform them; a girl's inability to perform these tasks increases her social exclusion within her household and the community. As part of their household responsibility, women are normally given the responsibility of caring for a disabled family member, presenting them with additional workload. The daily household management demands placed on women often reduces their ability to engage in education or livelihood activities, and the additional time spent on care-giving tasks further reduces this. In addition, in Nepalese culture girls are expected to marry and leave their home to live with their husbands; however, disabled women find it hard to marry, forcing them to stay in their home and increasing the perceived burden on their family.

# Water and sanitation services for the differently-able: experiences and solutions

Generally, discussions about inclusion in the water and sanitation sector focus on the needs of women, children and disadvantaged groups only. Without incorporating a disability perspective, a significant number of those most vulnerable to poverty will remain excluded. This is often a result of the lack of specific knowledge and skills in this area. However, to ensure that the water and sanitation sector is truly inclusive, all projects and programmes must address the needs of the disabled in their policy, planning, implementation and management.

A commitment is required from all sector actors that physically-impaired people must be supported in gaining equal access to water and sanitation services. To achieve this, in the most part, requires simple considerations only: for example, adding a set of handrails in squatting latrines or lowering the height of a tap. The inclusion of differently-able people within a community should be viewed in terms of the opportunities created for them to be involved in and benefit from community activities, such as a water and sanitation project. An essential part of addressing water and sanitation services is to take into consideration the needs of the differently-able and their families.

In April 2004, WAN supported one of its partners, Nepal Water for Health (NEWAH), to carry out a study on "Making Latrines User Friendly for Everyone: An Exploratory Research Study on the Discomfort faced by Pregnant Women, Elderly, Overweight, Sick and Disabled People when Using Squat Latrines". This aimed to explore the difficulties faced by physically-impaired people in using latrines and to find out how latrine-designs can be improved and made more suitable. As recommended by the study, NEWAH implemented "Sanitation Access for Disabled People Project" in eight Village Development Committees of Baglung district. This was done in partnership with a local NGO, Gaja Youth Club (GYC), which has for some time been working to address disability issues in the district. Some of the key objectives of the project were to train local social mobilizers and increase knowledge and awareness; to provide user-friendly sanitation facilities to differently-able people; to enable sustainable hygiene practices amongst disabled people and their family members; and to evaluate changes in health and sanitation behaviour through the project.

The implementation of various user-friendly water and sanitation services, including the initial work in Baglung, raised the following key considerations for ensuring the needs of differently-able people are addressed in accessing water and sanitation services:

## Coordination among implementing agencies and influencing policy

Close coordination of planning, designing and implementing among all the agencies working in the sector, focusing on the issue of disability, creates more effective solutions to addressing the barriers faced by differently-able people in accessing water and sanitation. Bringing together agencies that possess different skills can ensure that the comparative advantages of the organisations are capitalised on and can enable each agency to play a complementary role, avoiding duplication and

building greater levels of synergy. In the past, such coordination has also led to better impact by sharing lessons learnt, replicating good practices and increasing resource mobilisation opportunities. Above all, a uniform voice creates awareness for bringing about positive change in the sector.

NEWAH has been working in water and sanitation issues for 15 years, during which time it has implemented over 1,000 Water, Hygiene and Sanitation (WHS) projects across Nepal. As NEWAH has focused more on the inclusion of marginalised and excluded groups in its approach, as well as ensuring total sanitation coverage in communities, the needs of disabled people have increasingly been brought to their attention. Gaaja Youth Club (GYC), based in Baglung District, is a local NGO working with disabled people. It had been involved in medical support, economic development and the provision of material support for artificial legs, crutches and wheelchairs for disabled people since its establishment in 1994. GYC was striving to provide sanitation facilities to the disabled people in the district; however, they lacked the skill, technological know-how and funding.

NEWAH and Gaaja Youth Club came together in 2005, bringing their specific areas of knowledge, to implement a pilot sanitation programme, "Sanitation Access to Disabled (SAD)", targeting people who were not able to use conventional latrine models. The SAD programme initially targeted 51 disabled people with the aim of developing and piloting sanitation technologies and also improving the health and hygiene status of the disabled people. NEWAH and Gaaja Youth Club also worked closely with Disabled Support Committees and Self Help Groups at the Village Development Committee (VDC) and municipal level,

mentioned below, to implement the project and ensure longer term support.

The outcome of the pilot programme was the development and testing of a number of technologies to increase disabled people's access to sanitation facilities. In addition NEWAH and GYC became more confident in methods of addressing disabled people's sanitation needs. Following two district level workshops, involving disabled people, their families and other stakeholders, a District Disabled Support Committee (DDSC) has been formed, under the leadership of the District Development Committee (DDC), to coordinate, plan and share the aims and outcomes of programmes targeting disabled people in the district. This, along with other advocacy activities, has increased the sensitivity of the DDC, concerned VDCs, local NGOs and other stakeholders to the needs of disabled people in development interventions. The DDSC now aims to support activities that will increase sanitation access for the remaining disabled people in the district.

In addition in Baglung, there are currently 12 Disabled Support Groups at VDC level and two Self Help Groups in Baglung municipality. These Civil Society-led Organisations (CSOs) comprise nine to 13 members, representing disabled people, their family members, teachers, social leaders, health post staff and female community health volunteers. The main functions of these organisations are to mobilize funds for the welfare of disabled people and coordinate with other district-based organisations to ensure support to disabled people. NEWAH and GYC have encouraged these organisations to network with each other and link up with the District Disabled Support Committee, and they now meet monthly.

The network of government bodies and civil society groups at district and VDC levels has enabled best practices and lessons learnt during various projects to be shared with decision makers, organisations representing the disabled and other concerned agencies for more effective water and sanitation provision to differently-able people. WAN's experience has shown that multi-stakeholder workshops and talk programmes have been successful in creating awareness of disability issues. In addition, increased sensitivity and media coverage of disability has proved an effective means of increasing awareness among the public and influencing national policy and programmes. Finally, as mentioned early on in this document, though appropriate policies are in place in Nepal, often they are not implemented, leaving disabled people unable to use their fundamental rights. Increased awareness and monitoring of policy for addressing disability in the provision of services is still required.

### Use of appropriate technology

WAN and its partners' key principles regarding appropriate technologies – cost effective, easy to operate, widely available, low maintenance – are even more imperative when developing water and sanitation solutions to address the barriers and needs of differently-able people. Despite available expertise and a number of good resources, our experience shows that in too many cases implementing agencies have not adopted a disability-friendly perspective when constructing water pumps, taps and latrines. This is true of government, private sector and aid agencies. As a result, the designs are not suitable for differently-able people to use.

The key principles set out in "Water Supply and Sanitation for disabled people: a Resource Book"

produced by WEDC in 2004 are universally applicable and a useful reference when considering technical designs.

Although the WEDC Resource Book provides many simple, low-cost technology options, which are clearly illustrated, our experience shows that it is not sufficient just to introduce tried and tested technologies. The challenge lies in adapting these technologies to meet specific needs of different users, as well as sufficiently addressing the challenges posed by a specific terrain and providing culturally appropriate designs and solutions. Consulting with the users and basing decisions on their views and considerations has been fundamental in meeting this challenge. A case in point is the pilot project carried out in Baglung where efforts have been made to address the needs of the disabled in all school projects.

Based on training programmes that were carried out by WAN's local partner, NEWAH, two types of supports for the physically-impaired were devised to build latrines – one was made from a metal frame and the other used a wooden chair with arms. Both types included a plastic seat and cover, attached with nuts and bolts, over a central hole. The metal-framed seat without arms is more appropriate for those people with strong upper bodies but without the use of their legs, whereas the arms on the wooden chair help those with upper body paralysis or people who cannot control the movement of their limbs. The arms of the chair can be either on one side or both sides, depending on the person's requirement.

Technologies have proved to be readily adopted and maintained when easily available local materials are used in their construction. The use of local materials involves the individual in the procurement and development of the solution, increasing ownership and reducing costs. In addition, we have found that the use of locally available materials also leads to better maintenance and upkeep, increasing the sustainability of these solutions. Involving users in the process of designing water and sanitation facilities and setting up local facilities for the sale and supply of construction materials to ensure continued availability are other considerations that encourage the use and acceptability of locally available and appropriate technology.

Where even conventional latrine materials and accessories are not available at the village or even district levels, user-friendly options for disabled people are even more of a challenge to access. The District Disabled Support Committee has harnessed the skills of grill and furniture workshops, based in the district headquarters, and developed an effective supply chain for a varietry of accessories for adopting water and sanitation infrastructure to suit the needs of disabled people. Our experience has shown that training local businesses on existing userfriendly technologies and the needs of disabled users is very effective, not only increasing the availability of appropriate skills and materials, but also encouraging local innovation.

Completing the supply chain linking manufacturers with possible outlets for their goods, such as local shopkeepers, has proved successful and also enabled materials to be more widely available. To ensure continued production and distribution of materials and technologies, a workable, sustainable business model needs to be in place. However, initial incentives can act as a good catalyst to start the process. For example, the hands-on training of local labourers in Baglung for building accessible water and sanitation services has not only helped build local capacity but also

### BOX 1 Guiding principles for planning and design of user friendly water and sanitation services

- a. Accessibility: Water and sanitation facilities should be accessible to all people, including those with disabilities, elderly people, pregnant women and children. Limitations faced by the differently-able like physical discomfort unable to walk without aid or unable to squat - and psychological problems - fear of falling without support rails - are some of the issues to be considered.
- b. Access: People with disability should, without assistance, approach, enter, pass to and from, and make use of water and sanitation facilities without undue difficulties. Barriers in the natural environment like a steep terraced landscape or slippery and uneven path should also be considered. The cultural practice of locating latrines further from the residence may be a challenge for the differently-able.
- c. Usability: Water and sanitation facilities should be built in such a way that everyone can use them. It is not sufficient to provide water tanks or water pumps when the height of the tap is beyond the reach of different users or additional help is required to operate the water pump. Water is commonly stored in traditional storage pots which are large and heavy. Provision of taps and even platforms for the storage pots at an appropriate height would ensure minimum physical stress when lifting full water containers.
- d. Safety: Water and sanitation facilities should be built in such a way that everyone can move about without undue hazard to life and health. The safety of slippery surfaces, such as on toilet floors or paths, can be improved by providing supports rails or finishing with a slightly rough surface for those with poor balance. Where squatting latrines are preferred, handles or rails for balance while squatting and getting up are minor additions that go a long way enabling safe access to water and sanitation services for the disabled. Latrines with wide doors and with simpler locking systems can be used by all.

ensured maintenance and custom designing of the water and sanitation infrastructure.

### Financing mechanisms

The financial costs of water and sanitation services can have a significant impact on their successful implementation, functionality, usage, reach and sustainability. The modification or adaptation of water and sanitation infrastructure designs can add an increased financial burden. As mentioned above, households with disabled members are often among the poorest in society, especially when it is the head of the household who is disabled. Appropriate financing mechanisms need to be developed to ensure that the services are affordable to the poorest section of community. These should also foster ownership.

If addressing disability is viewed as the responsibility of the whole community, the financial cost of adapting infrastructure to make it inclusive needs to be borne by all. As mentioned above, with the public benefits of water and, especially, sanitation services, it would seem logical for the whole community to invest in ensuring access for all. One member of the community continuing to practice open defecation, due to inappropriate infrastructure, could mean the whole community continues to suffer from disease and illness.

The balance between external and internal service support is crucial to ensure appropriate services can be built and at the same time the community maintains ownership. Financing water and sanitation services, and specifically those modified to ensure access for differently-able people, requires a community resource plan. This should identify the level of financial and non-financial

### BOX 2

Samjhana Kisan is a 14 year old girl from a disadvantaged and poor family in ward three of Baglung municipality. Her parents work as daily-waged labourers and she is the oldest among five children in the family. She is mentally impaired, has limb problems and cannot speak, walk or stand by herself.

Samjhana's parents built a latrine and bathroom in the yard some years back on their own. The latrine had a squatting pan and Samjhana had to rest her hands on the wet latrine floor while using it. Her parents had not considered her requirement while constructing the latrine and were also unaware of the technology available for the disabled. NEWAH provided her a wooden commode with arms at both sides and a support at the back, which was designed with her specific her needs in mind. It used local materials and the skills of a carpenter in the community. Samjhana can now comfortably use the commode and her mother's fear that she might fall off the chair is put to rest as it has support from three sides. The family are also happy knowing that alternations and repairs to the commode can be made relatively easily.

inputs needed, and decide how stakeholders, both internal and external, can contribute these, based on their specific situation and needs.

There are various models for sharing costs: between the funding agency and the community, the government and a household, even public and private partnership. In one example from a project WAN supported, the cost of the facility was charged based on the need of the family. For those who already had a latrine, only the cost of the commode was charged; the family paid for the construction. This practice was widely appreciated. In one village people even took out loans to construct disability-friendly latrines which could be used by the entire family.

In Baglung, the District Disabled Support Committee has established a fund of NRs. 75,000. The fund has come from the DDC (NRs. 25,000), Save the Children – Norway (NRs. 15,000) and VDCs (NRs. 2,000). Groups or individuals can access the fund to support sanitation activities for disabled people. VDCs who have contributed to this fund have become increasingly aware of this issue and are now working with the VDC-based Disabled Support Groups. They have demonstrated their commitment to addressing disabled access to basic services, such as water and sanitation, in their VDCs by establishing VDC Disabled Support Funds. The VDCs have raised these funds, also targeted at the welfare of disabled people, through donations, cultural shows and other local initiatives. These funds are generally disbursed to disabled people for income generation activities, at a minimal interest rate, but have also enabled the construction of user-friendly water and sanitation services.

## Ensuring participation of disabled and the differently-able

It has been long recognised that participation is a crucial aspect of ensuring that services are appropriate for those that they are designed for and to generate a feeling of ownership. The representation and active participation of differently-able people in any community committee or group that designs, constructs, manages and operates a water and sanitation scheme has proved to be an essential component in getting their voice heard. Another approach that has proved successful is the forming of a grievance committee. Although this is not yet a core part of our approach, it has helped people air their concerns over the needs of specific groups not being addressed.

The mobility of disabled people often restricts their ability to attend community meetings and participate fully in the process. This creates barriers in receiving the voices, views, and considerations of the physically-impaired in key decision-making processes. Without their participation, it is impossible to ensure that the needs of disabled people are properly reflected in any planned activities. Their input in the planning process will also guarantee that changes don't have to be made to accommodate their needs at a later stage, which often results in unnecessary additional cost.

In the true spirit of representation disabled people should be given a platform and space to articulate their own needs rather than have others make decisions or assumptions on their behalf. These factors need to be carefully considered and taken into account, which could mean holding the meeting close to or in the house of the physically-impaired person, or ensuring that their views are represented by a family member or friend. NEWAH has integrated household-based health education into its health promotion approach, ensuring that resources are available to provide health education classes directly to the houses of those families with disabled members.

Water and sanitation professionals often lack specific knowledge and skills for addressing the needs of differently-able people. They should consult with organisations representing the disabled while building water and sanitation services to incorporate their perspective and experience. For example, while engineers have design knowledge and skills, they may not always be aware of the needs of differently-able people. On the

other hand, those with specific needs, although having a clear understanding of their disabilities, may not know about engineering solutions that could help them.

A tool that has proven to be effective is undertaking an accessibility audit at the same time as surveying water and sanitation services to identify the specific issues and needs of differently-able members of the community. These surveys have been used to capture information not only on the access needs of the disabled but also on the level of awareness among the general population regarding the challenges faced by disabled people. This kind of awareness among the general population is highly important in breaking down barriers and preconceptions around this issue. With careful consideration, it is not difficult to ensure inclusion in design, implementation, operation and management.

## Addressing social stigma and changing attitudes towards disability

In a society where stigmas are attached to people with impairments and the resulting disabilities are often considered a burden, increased understanding around the issue of disability, and where responsibility for addressing it lies, is critical. Our experience has shown that having the ability to take care of themselves has had a positive impact on the self-esteem of disabled people, and also the attitude of others towards them. Infrastructure that enables all people, irrespective of their ability or impairments, to independently access water and sanitation services has led to an increase in the self-respect and self-reliance of disabled people. In addition, this helps families to save time and effort, thereby releasing time for income-generating activities as well as household chores.

Increasing the voice of disabled people through their engagement in planning and implementing water and sanitation activities has also proved to be very empowering. It not only gives people living with impairments increased confidence to express themselves in public arenas, but also shows other members of the community what value and positive contribution they can make to community development. It may not be possible to meet the individual needs and demands of everyone meeting some needs may be beyond the scope of a specific water and sanitation project. Nevertheless increased information, awareness and thought on the part of implementing agencies could make the difference for a disabled person between being included and excluded from a service.

### Conclusion

When the phrase "services for all" is used, it is often not backed up with a thorough analysis of its implications. Different groups have a wide variety of needs, and social, financial and institutional barriers must be overcome to address these needs and ensure everyone can access water and sanitation services. Within rural Nepal, disability is a significant issue with many people experiencing impairments, of all natures, due to poor healthcare, accidents, armed conflict, old age and many other factors. The needs and voices of the disabled have long been ignored, and the responsibility for the barriers that result in disability and increase their exclusion given to the individual, not society.

Traditional water and sanitation project approaches have inadvertently excluded disabled and differently-able people. This further increases inequity and makes achieving community water and sanitation outcomes, such as an open

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Hari Bahadur Sapkota, a resident of Maalika VDC, Banglung, Nepal, is 52. He has been physically-impaired by paralysis in both his legs. He had been married three times but all his wives abandoned him. He told us that one of the main reasons his wives left him was that they could not share his plate for meals as he used to crawl and rest his hand on the latrine while defecating. As a result his wives considered him to be unclean. With no visible solution, they left him. However, with the installation of a commode in this latrine, which allows him to sit more comfortably while defecating, as well as keeping his hands away from the pan, Mr Sapkota is no longer considered dirty. In fact, due to his increased hygiene practices, he has been entrusted with the responsibility of cooking for his entire family, while other members earn an income.

defecation free environment, impossible. Increased sensitivity and awareness of the causes and impact of disability in designing and implementing water and sanitation projects can result in more inclusive outcomes, which benefit the whole of society, with relatively little extra cost. From a social perspective increased participation, for example through establishing grievance committees and undertaking accessibility audits, will increase awareness of the needs of those living with impairments and the community nature of disability. Technical innovations to address the specific needs of different individuals in a wide range of environments can be more easily stimulated with

increased knowledge of the barriers they face. Simple technical solutions, such as railings and commodes, which address the real and specific barriers to water and sanitation access, have a significant impact on the disabilities people face.

Within Nepal there is expertise and experience in both the disability and water and sanitation sectors which can be leveraged to increase awareness, improve approaches and ultimately improve the delivery of services to disabled people. There is also a responsibility for stakeholders working in this area to place increased pressure to ensure that the government honours existing commitments and policies in relation to disability. In addition, they should support the government in developing effective policies and capturing knowledge, share experiences and promote best practice towards achieving water and sanitation services for all disabled people in Nepal.

The water and sanitation sector should strengthen its focus on access for differently-able people. WAN recommends that, building on the successful ongoing collaborations in Baglung Districts and other areas of Nepal, formal stakeholders groups made up of relevant government agencies, NGOs, disabled people's organisations and other interested civil society groups are established to look into addressing the main barriers outlined in this paper.

### References

**DFID** (1998) Guidance Manual on Water Supply and Sanitation Programmes

Jones, H et al (2005) Water and Sanitation for Disabled People and other Vulnerable Groups – Designing services to improve accessibility, WEDC Jones, H et al (2004) Delivering Water and Sanitation Services to Disabled People, WEDC

Nepal Apang Samaj (2005) Khane Pani Tatha Sarsafai Ma Apanga Ko Pahuj

**NEWAH WRO** (2004) Making Latrines User Friendly for Everyone: An Exploratory Research Study on the Discomfort Faced by Pregnant Women, Elderly, Overweight, Sick and Disabled People when Using Squat Latrines

**NEWAH** (2005) Case Study on Addressing Sanitation Needs Of Disabled People in Nepal

Rijal, S (2005) Physically challenged deprived of friendly toilets, The Kathmandu Post

WaterAid Nepal (2005) Providing Water and Sanitation to Disabled People, Some of the Poorest People: Ideas to Help NEWAH Start Addressing This Issue

WaterAid Nepal (2005) Executive Summary: WaterAid Nepal Country Strategy 2005-2010

WaterAid Nepal (2006) Sanitation Access to Disabled Project #3876