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### PEOPLE-CENTRED APPROACHES TO WATER AND ENVIRONMENTAL SANITATION

# Disability and Gender in Rural Sanitation

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*'Disability' and 'Gender' are major issues on their own, and can be discussed and debated at great length from various perspectives. However when we consider the specifics of rural sanitation it doesn't need a PhD or major lengthy debates around the issues in order to make a difference to people's lives, since the technology to provide support in these areas is relatively straight forward. What is required however is the awareness that these are real and essential issues to be considered, and that the responsibility of action lies with ourselves as individuals, to solve the problems and incorporate them within rural sanitation programmes being implemented. This paper tries to emphasise the problems that can be experienced around gender and disability issues, and offers suggestions as to how some of these related problems can be addressed in a very simple manner, so that sanitation practitioners can aim at providing for ALL people within our communities.*

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## Introduction

This paper focuses on disability and gender issues in rural sanitation programmes in South Africa, and provides ideas and suggestions illustrated with a variety of examples based on the writer's experience in South Africa. The reason that disability and gender are considered together is that all disabled people have a gender, and they experience many common issues that are often forgotten about during the implementation of rural sanitation. It is hoped that development organisations worldwide who are implementing similar programmes will learn from these experiences, so that they too will give considerations, where applicable, to such issues when implementing rural sanitation programmes within their own countries. Although the writer's experiences focus mainly on Institutional Sanitation, the same philosophy and principles also apply to Household Sanitation.

The Millennium Development Goals have been set and organisations around the world are implementing both household and school sanitation to a basic level of service in order to meet the targets. In South Africa, National Government has set its own target of providing all people with at least a basic level of sanitation by the year 2010. When trying to achieve South African or International targets, how many Governments/sanitation practitioners have really considered disability and gender needs when implementing projects? Many will claim that these issues have been incorporated into their plans, but little evidence is seen on the ground of suitable physical infrastructure that addresses the needs of the disabled and women in particular.

This report will define disability and gender needs, and give details of what Umgeni Water is presently incorporating into its sanitation programmes to ensure that such issues are suitably addressed.

## What is Disability?

A disabled person is someone who is physically and/or mentally 'challenged'. It could be debated whether or not we are all disabled to some degree, as we all have physical and mental limitations. A short person is physically challenged when it comes to trying to change a light bulb compared to a taller person. It is perhaps a little misleading to suggest that every person is disabled, but my point is to get away from a 'them and us' scenario and to consider the able and disabled together, when implementing sanitation programmes.

What sanitation practitioners must do is, to consider the diversity of people's needs in an holistic manner and to cater for these needs in the design and building of rural toilets. This means making provision for the young and old, the tall and short, slim and fat, those with limbs or no limbs, those that crawl, pregnant women, the sighted and the sightless, those that are in a dependent stage of AIDS related diseases, those that need assistance to use the toilet and those who may or may not use a wheelchair. The above categories can be considered by some to be able bodied and/or disabled depending on their viewpoint, but ultimately they all share the same problem of having specific needs. If we consider these needs together, then the problem can be addressed in an holistic approach. We all have our own particular needs, we are all physically challenged to a certain extent - let's cater for ALL!

In some countries there is a certain stigma around disability, such that disabled people are excluded from decision making around livelihood issues. They are sometimes kept away from able bodied people and have to use separate toilets in the mistaken fear that their disability can be transferred to others. As such, the service delivery approach to any rural sanitation programme, which is not covered in this paper,

must also be considered.

## What is Gender?

When we refer to gender, we are talking about male and female, man and woman. This report will look at sanitation issues in respect of the specific toilet needs of each gender.

Engineers are often accused of being short-sighted when it comes to social issues and certainly the field of engineering was once a narrow-minded male dominated profession, but now the women are coming through and squashing this naivety of their male counterparts.

### Key issues affecting gender

Female sanitation needs cannot be emphasised enough. Improper and inadequate sanitation facilities at rural schools for example, can often result in absenteeism of young girls who during menstruation stay at home where they have more privacy. For one girl this can mean a loss of between 36 and 84 school days in a year - a huge period of time away from their education.

The health and hygiene needs of both boys and girls are critical to students well-being and attendance at school. A principal at a school in Venda Province explained that as a result of proper sanitation facilities and good health and hygiene training, absenteeism had dropped from 6 children a week to one child every 2 weeks. Five and a half school 'child' days were saved every week in this particular school. The cost saving as a direct result of suitable sanitation facilities, equated to the cost of educating one child at this school. Imagine putting a figure to this and multiplying it by every school in South Africa presently without facilities! By equipping schools with proper gender sensitive sanitation facilities a potential saving of millions of \$US exists per year – a saving that could allow many more children an education.

## Design Implications

### Gender

Let's consider urinating as a number 1 and defecating as number 2, and I think we can all agree that a number 2 is the same for both sexes; the fundamental difference is with the number 1. A female has to sit or squat for a number 1, whereas the male has the additional choice of standing for a number 1.

This difference in the case of males can easily be accommodated by the provision of a urinal or similar. It must be emphasised that a urinal arrangement is not essential but from a health and hygiene perspective is ideal, since it is easier for males to direct urine into a urinal, rather than through a toilet seat or a squat toilet, where other people may have to sit or stand.

For a number 1, it is also more important for a woman to wipe herself afterwards, which then requires the disposal of whatever is used for wiping. A man however can shake off any residual urine.



**Photograph 1. Handwash facilities inside an ablution block**

Probably the most important difference between the genders is that women menstruate and the implications thereof.

For women living in rural areas, there is a lack of availability of sanitary protection, and girls and women often use cloth or newspaper during their menstrual period. This is obviously much more uncomfortable and ineffective. It is therefore essential to cater for the needs of the woman in this area.

In the case of menstruation, the issue of privacy is of utmost importance. When newspaper is used, or any other item that is to be disposed, then the sanitation facility must cater for the private and hygienic disposal of such an item. With a pit latrine, items can be deposited into the pit. When a cloth is used, the girl or woman may require to rinse the cloth with water, and so a hand wash facility must be provided in an area that is private to the user. Ideally, this would be located in the female ablution block. It may also be appropriate to have a bucket available so that the user can wash cloths in the cubicle and pour the water into the pit.

The final issue that is more important than anything else is that of security against rape, and abuse of any kind. Toilets are sometimes constructed in a remote area of a school yard without thought to the social implications and security which can create opportunities for abuse. Up to 40 000 women are raped each month in South Africa. By reducing opportunities for rapists, hopefully the statistics can also be reduced. A design that reduces a rapist's opportunity and saves even one woman from abuse is a design worthwhile.

### Disability

Disabilities take so many different forms with a range of needs, that it is difficult to cater for each and every type. However, some simple inclusions and considerations to a design can cater for the majority of people. The most common general forms of needs are mobility and/or obesity related.

The standard Ventilated Improve Pit (VIP) latrines, that a lot of practitioners use, do not generally cater for the 100kg

plus individual or somebody more than 2m tall. Every rural community has people like this and to accommodate these people, the bottom structure of a pit latrine need not be considered, only the top structure, in order to ensure sufficient space to house the person. Latrines with varying sizes of top structures must be made available to the users, for all types of sanitation infrastructure to be implemented.

Then there is the question of mobility and access. An ablution block in a clinic in the Limpopo Province had a 350mm high step going up to the block and it would take 2 nurses to support a 60kg walking patient up the step and into the block. Did the engineers ever give consideration to who the end-users would be in this case? A little forward thinking is all that is required – sometimes a small step is needed to keep out water and dust, but in most cases steps can be minimal or non-existent. Where a small step is required a simple ramp can be constructed using concrete, earth or another local material. Ramps should be at least 1m wide with a maximum gradient of 1 in 10 to allow self-propulsion of a wheel-chair. Simple; can cost almost nothing, but is extremely effective!

The inside of the cubicle must be large enough for a wheelchair to pull alongside the toilet pedestal for a sideways transfer. In front of the pedestal there must be enough room for a wheelchair to make a full 360 turn. This not only gives enough space for a wheelchair to turn around, but also for 2 assistants to help transfer a person onto the pedestal should this be necessary. Ideally, a cubicle of a minimum of 1.8m square would suffice with the pedestal located towards one of the corners. Other simple design features that should be incorporated include:

- A toilet pedestal seat 500mm above ground level.
- A cubicle door that must open outwards. The door should be 1m wide.
- A large lever type lock on the door. (This can also be made from wood.)
- Lever type taps for hand washing facilities should be 800mm above ground level.
- Grab handles which can be made from wood - should be fastened to the wall and should be 700 to 800mm above ground level on the side wall closest to the pedestal, and behind the toilet.
- Toilet roll to be fastened to the side wall, and not on the wall behind the toilet.

In countries where a squat toilet is used instead of a pedestal, a simple seat can be made quite cheaply using wood, or a broken plastic moulded seat with a hole cut out for access to the toilet. With a little imagination and lateral thinking, alternatives can be found.

This kind of layout would be suitable for any type of sanitation facility whether it be a pit latrine, ventilated pit latrine, waterborne system or other.

The cost of providing such a facility for the disabled can be minimal, with the major cost being the extra bricks for the additional width and length of the cubicle. All other equip-

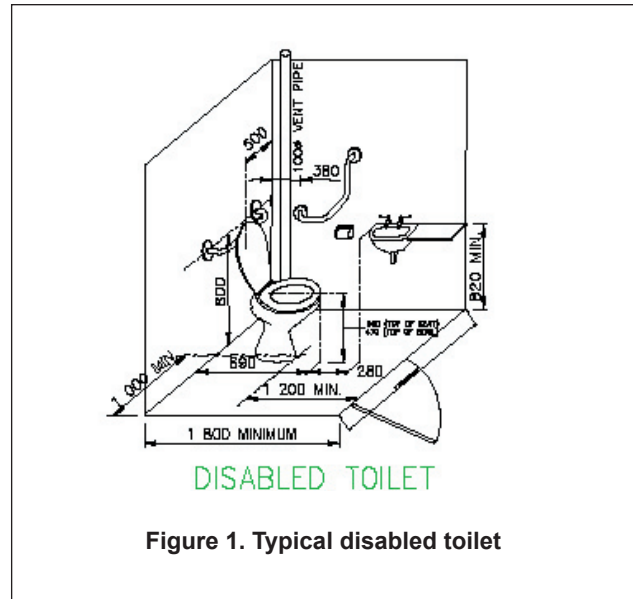


Figure 1. Typical disabled toilet

ment such as the grab handles and lock can be made from local materials. The substructure remains as standard.

## Household versus School/Clinic Sanitation

### Household sanitation

As sanitation practitioners, we must ensure that any rural sanitation programme being implemented includes the design of a toilet top structure that caters for special needs (besides the more conventional design), and which includes facilities as described above.

Should a household require/need such a toilet, then an individual needs assessment must be made, and the technical option presented to the individual with clarity being made to any additional cost. This extra cost would have to be paid for, either by the household or the subsidising body, depending on what can be negotiated within the programme and with the relevant funder.

### School/Clinic Sanitation

Every ablution block that is constructed must be single sex and include at least one facility for the most severely disabled. Whether or not a particular school has a child or teacher that needs that kind of facility at the time of construction, it must still be constructed for future needs, unexpected use, temporary disabilities, visitors and so on. In the case of schools it is recommended to modify the staff toilet to cater for disabled people. In the case of clinics a suitable number of cubicles should be accessible depending on the size of clinic and the number of patients served.

Urinals should be provided in the boys'/men's toilets, installed at different levels to cater for different heights of people. Toilet pedestals should have continuity in construction, and indeed different sizes can be made available for very young children.

Each ablution block must have hand wash facilities inside the blocks, preferably with rain water harvesting as a back-up supply. A portable bucket must also be made available within the girls'/women's ablution block.

All ablution blocks must be designed to reduce the risk of abuse and rape in and around the area. This will be area specific, and the blocks should be located within vocal reach of the education blocks or surrounding houses, and the remoteness of such blocks should be restricted. Also try to keep the girls' block and boys' block as separate as possible, so that a boy straying in the 'wrong' area can be more easily noticed.

## **Conclusion**

There is no reason or excuse except a lack of understanding to leave out disability and gender issues in the big sanitation picture. There is little or no additional cost to incorporate such facilities – all that is needed is just good planning, forward thinking, consultation with the right people and a concerning attitude for the well-being and needs of the end users. These qualities are relevant whatever the sex, whatever the age, whatever the physical or mental abilities a person may have.

Disability issues and gender issues may be different in many respects but what they do have in common is that able-bodied people often forget about the needs of a disabled person, in the same way that one sex often forgets about the needs of the other.

The writer of this paper also uses a wheelchair, and has heard many able bodied people saying 'Do you know, I never realised there was a step there until I came along with you in your wheelchair!' – A lack of understanding is not a sin on its own, but not acknowledging the gap and reacting to better oneself and the work one is doing most certainly is. For those people that read this paper, I hope you are now further enlightened to the needs of disabled people and differing genders in rural sanitation – now it's time to go out and make a difference in the programmes you are implementing so that disabled people and women in particular can have the level of dignity expected when it comes to the basic human right of sanitation.

## **References**

Photographs courtesy of Mvula Trust and Mukula Secondary Schools, Limpopo Province, South Africa

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