RURAL TRAVEL AND DISABILITY IN LERORO AND MOREMELA VILLAGES, SOUTH AFRICA

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Abstract

This paper presents insights into rural travel and mobility issues facing persons with disabilities [PWD]. The linkages and impact of existing social, economic and physical constraints to rural travel and movement is explored and discussed. Greater insights and understanding of rural travel and movement issues impacting and impacted by PWDs is gained by means of making use of a rural case study of Leroro and Moremela villages, Mpumalanga Province. The study findings and results indicate that although on average PWDs in rural areas face similar travel and movement challenges as those in urban areas, the complexity and peculiarity of rural local level travel and movement may not necessarily demand the same range of interventions that typically would resolve similar challenges in an urban setting. Hence, PWDs in rural areas face significantly different levels of challenges that require interventions and strategies that are pitched at a different level. The paper further posits that perhaps it is time that a PWDs rural travel and movement intervention theory that goes beyond basic human rights activism and marxist community building theory proponents be advanced. Such paradigm shift will propagate an alternative and appropriate PWDs rural travel and movement intervention philosophy that adds on to existing responses through recognizing that perhaps “wheelchairs, walking sticks/rods and special shoes” are not enough.

Key Words

People with disabilities, rural travel and movement, appropriate interventions, South Africa

INTRODUCTION

Throughout the developing world, in both urban and rural areas the existing transport and spatial systems fail to serve the needs of the majority of PWD [South Africa Department of Transport, 2001; South African Human Rights Commission Report, 2002; Quinn & Degener 2002; Mahapa, 2003; European Union, 2004; DFID, 2007; United Nations, UN Enable, 2010]. This is despite the fact that disabled people in developing countries make up around 10 per cent of the population [Dudzik & McLeod, 2000]. The World Bank, 2003 estimates that 20 per cent of the world's poorest people are disabled [DFID, 2007; UN Enable, 2010]. This means that disabled people comprise one of the largest single groups of excluded and chronically poor people in the developing world [European Union, 2004; Chowdhury, 2005]. However, disability is not mentioned in any of the 8 MDG goals, the 18 targets or the 48 indicators [DFID, 2007]. Challenging exclusion is central to reducing poverty and meeting the MDGs. So promoting the inclusion, rights and dignity of disabled people is central to poverty reduction, achieving human rights and making great strides towards meeting the Millennium Development Goals targets [MDGs] [United Nations, 2002; Venter et al, 2004, UN Enable, 2010].

The lack of adequate and affordable transport services undergirded by sound transportation infrastructure is an obstacle to achieving meaningful service delivery [Chakwizira & Mashiri, 2009]. This is particularly common for people living in remote rural and poor urban and peri-urban areas [Mashiri et al, 2007a]. As part of the overarching framework of the South African National Transport Policy it is envisaged that policies in the transport sector will be outward looking, shaped by the needs of society in general [South African Department of Transport, 1996]. Among those needs is transportation for PWDs.

Linkages between, transport, poverty, disability and development

Poverty and disability reinforce each other [DFID, 2000; World Bank, 2003; DFID, 2007]. Disability is both a cause and consequence of poverty [DFID, 2000]. Poor people themselves describe people with disabilities as among the most excluded 'poorest of the poor' [Narayan & Petesch, 2002]. Poverty leads to greater rates of disability arising from malnutrition, limited access to health services [including vaccinations] poor sanitation and inadequate information about the causes of impairment [World Bank, 2003; DFID, 2007]. As many as 50 per cent of disabilities are preventable and directly linked to poverty [United Nations, 2008a,b]. Furthermore, without due strategies to address the social, spatial and economic exclusion of PWD, disability in turn exacerbates poverty [DFID, 2000; Mashiri et al, 2007a; DFID, 2007]. Increasing social isolation and economic strain, and constraints in access to education, employment and services, all increase the vulnerability of PWD to poverty [UN Enable, 2010].

Rural Transport and disability in South Africa

South African national policy and legislation articulates the responsibility of both government and civil society to promote the full integration of people with disabilities

into society [Integrated National Disability Strategy, 1997]. This includes the instruction to government to “take steps to reasonably accommodate the needs of [persons with disabilities]” [Section 9, Promotion of Equality and Prevention of Unfair Discrimination Act, 2000]. In the National Land Transport Bill, 2009 it is stipulated that the needs of special categories of passengers must be considered in planning and providing public transport infrastructure, facilities and services, and these needs should be met as far as may be possible by the system provided for mainstream public transport.

Although South Africa has made significant strides in the fight against poverty, there are still remarkable sections of the populations where service delivery is lagging chiefly in rural areas that were and still remain deprived of a basic minimum of infrastructure and services [Chakwizira et al, 2008]. The legacy of Apartheid remains visible as most of these areas remain divorced from essential services such as health, education and roads with weak integration of PWDs needs. Thus the National Rural Transport Strategy [Department of Transport, 2003; 2007] has been developed as a programme directed towards addressing the transport challenges faced by rural communities in terms of access and mobility to social services and economic opportunities. The strategy revolves around the notion that transport is potentially a powerful vehicle in seeking to achieve poverty alleviation and economic growth with development as well as a visible instrument for correcting spatial distortions.

A number of studies exists that discuss and attempt to link disability, urban socio-economic opportunities and development especially in the developed World [European Union, 2004, Venter et al, 2004; United Nations 2008a,b]. Stats South Africa, 2005 provides a generic overview of statistical indicators related to disability. An existing gap is the existence of anecdotal and insufficient evidence on the non-statistical dimensions of disability. This gap is much more pronounced regarding rural PWDs travel and movement literature especially in developing countries, South Africa included. Some few opinion pieces on rural transport and disability exist [Czuczman, 2003; Mashiri et al, 2007; Mashiri, 2007]. The major shortcomings of all the above mentioned studies and articles are that rural travel and movement for PWDS is analysed with urban travel and movement spectacles [i.e. methods and models]. While such approaches yield some interesting observations and results concerning rural travel and mobility for PWDs, it is difficult to conclude whether such results should be taken as conclusive, inclusive and comprehensive. Grey areas and blind spots regarding PWDs rural travel and movement still remain such as the exact travel and movement behaviour, decision choice alternatives involved for on-site and off-site travel activity patterns. This study sought to contribute knowledge and information focusing on stretching the understanding of the rural travel and mobility for PWDs. This was facilitated by a process of conducting empirical research making use of a case study in Leroro and Moremela villages, Mpumalanga Province, South Africa as one way of unpacking the rural movement and travel disability phenomena in rural areas.

Perhaps it is critical to define disability in order to provide a common platform for understanding the meaning and context in which the term and concept is used throughout this paper’s discussion.

Defining the concept of disability

Disability has medical, physical as well as social dimensions. The World Health Organization [WHO], in its 1980 International Classification of impairments, disabilities and handicaps, made distinctions between disability, impairment and handicap, which highlight these different dimensions of disability.

"Impairment" refers to the loss or abnormality of psychological, physiological, or anatomical structures or functions, for example Blindness, paralysis or the loss of a limb. *"Disability",* on the other hand, refers to the restriction of *function*, or lack of ability [resulting from an impairment] to perform an activity in the manner - or within the range - considered normal for a human being. This could include, for example, difficulty seeing or speaking, or difficulty moving, grasping, bathing, and so on. *"Handicap"* refers to the social and economic limitations of disabled persons that place them at a disadvantage compared to other persons. These disadvantages are brought about through the interaction of PWD with environments and cultures that exclude. Examples of handicaps include being bedridden or confined to home, being unable to use public transport or being socially isolated [World Bank, 2003; Venter et al, 2004; DFID, 2007; UN Enable, 2010].

PURPOSE OF THE STUDY

The objective of the study was to discuss the mobility patterns of people with disabilities and by extension highlight the barriers that hinder their access to basic needs. To realise the objective of the study, the under-listed research questions were generated, namely:

(i) What is the extent of the people with disabilities challenges in the study area?
(ii) What is the travel pattern of people with disabilities challenges in the study area?
(iii) What are the travel difficulties encountered by people with disabilities in the study area?
(iv) What are the implications of the existing transport facilities and services on the livelihoods of the people with disabilities?

STUDY METHODOLOGY

The case study approach was used for this study. The selection criteria included a typical rural area that is isolated, remote and dispersed. In addition the rural area had to have some history of known PWD groups. The participants and study area had to agree and be willing to participate in the study. If a rural area could exhibit peri-urban areas characteristics in addition to the above criteria, that would be an added advantage. All these requirements were satisfied by Moremela, Leroro, Matibidi A and Matibidi B villages in Thaba Chewu Local Municipality located in Ehlanzeni District Municipality.

The study applied primarily the focus group discussions technique to tease out transport issues and challenges faced by PWDs in the rural areas of Thaba Chewu Local Municipality located in Ehlanzeni District Municipality. Within Thaba Chewu

Local Municipality, all the two groups of PWDs [i.e. in Leroro and Moremela] participated in the research. These discussions were supplemented by individual interviews and discussions with PWDs who are not part of the formal groups, general community members who are not PWDs including key informants such as Department of Social Development [DSD], social and community development workers, school and hospital principals in the study area. In addition physical observations and the story telling technique method was used to gain deeper insights into the access and spatial mobility challenges that PWD face in rural remote areas such as typified by the case study encounter. These primary data collection techniques were complemented by an extensive review of literature and existing data sources on PWD in South Africa and from elsewhere in the World.

Location of the Study

The study area is located in the Thaba Chweu local municipality in Ehlanzeni District – one of the three districts constituting Mpumalanga province. As indicated in Figure 1 below, the district, which is made up of four local municipalities, namely, Umjindi, Thaba Chweu, Mbombela and Nkomazi, is bordered by Mozambique to the east, Swaziland in the south and Limpopo in the north.

Thaba Chweu is located to the north-west of Mpumalanga province. Large scale crop and game farming characterise the western half of the municipality centred around Lydenburg, while forestry activities predominate in the eastern half, with Sabie and Graskop as the centres. Communal areas of Leroro, Matibidi and Moremela, which are hemmed in between these major land uses to the northern tip of the municipality, were chosen as the study areas.

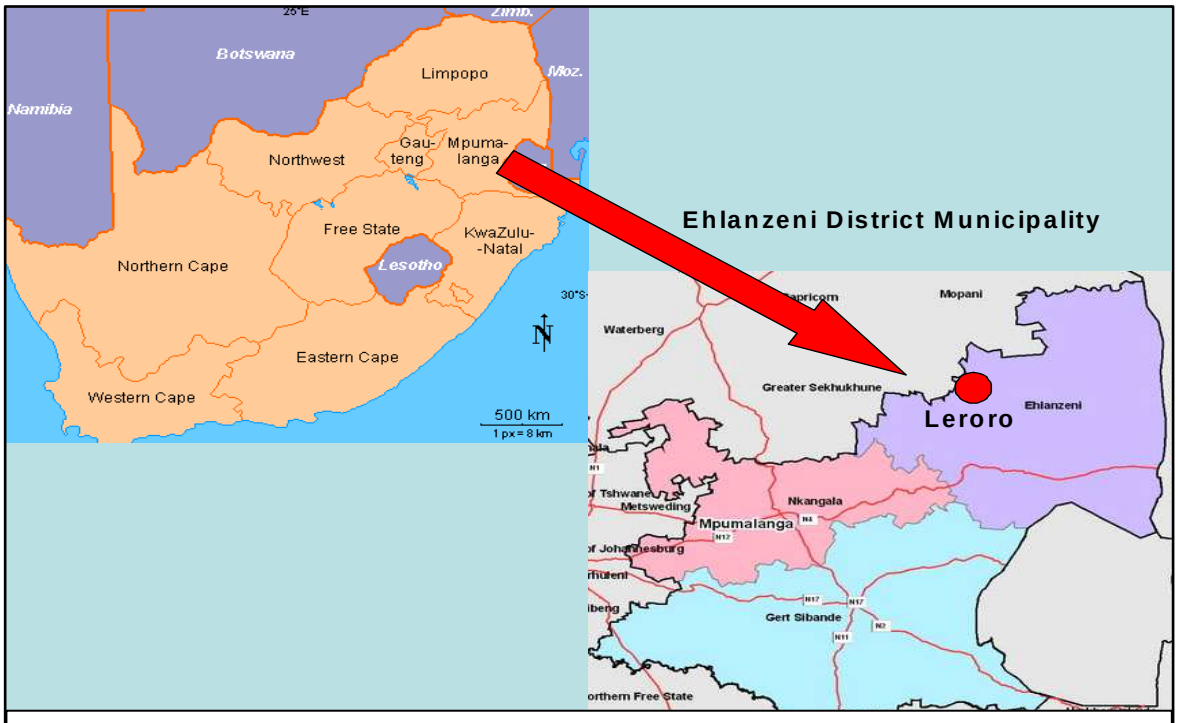


Figure 1: Location of the study area in relation to Mpumalanga Province

The study area, incorporating the villages of Leroro, Moremela and Matibidi A and B, fall under Thaba Chweu, one of four local municipalities constituting Ehlanzeni

District in Mpumalanga. Table 1 summarises the population demographics and disability statistics for the study area.

Table 1: Study Area Population			
		Population [Statistics South Africa, 2001]	Estimated PWDs in Percentage at 5.8 % [National disability percentage]
Study Village	Ward	Total	
Leroro	9	6 396	370
Matibidi A [Chief Mohlala]	8	14 426	836
Matibidi B [Chief Mashile]	8		
Moremela [Chief Moremela	9	6 648	385
Total		**27 470**	**1 593**

Expected Results

In particular the study expected results included but not limited to:

- *Providing an overview and assessment* of the current situation of disabled people in rural areas of South Africa;
- *Indicating the scale and prevalence of disability* using existing data sources [eg: Census, Demographic Household Survey etc] and estimations in the field;
- *Assessing perceptions and attitudes towards disability* [including attitudes amongst existing transport and rural development partners towards people with disabilities and their inclusion in programmes [including municipalities, hospitals, taxi associations, educational institutions, etc.]
- *Providing an overview of the role of the state*, disability services and persons with disabilities organizations [DPOs] in rural South Africa;
- *Mapping channels of support* on people with disabilities in rural South Africa;
- *Mapping organizations for and of people with disabilities* providing support and services to the group;
- *Identifying strategies* to facilitate greater involvement of people with disabilities in development and transport interventions;
- *Assessing current attitudes* amongst existing transport and rural development partners towards people with disabilities and their inclusion in programmes [including municipalities, hospitals, taxi associations, educational institutions, etc.]

Having paraphrased the expected results, the next section discusses the study findings.

STUDY FINDINGS AND DISCUSSION

The South African Disability wider Context

South Africa disability was estimated at 5 per cent by the Census 2001 [Stats South Africa, 2005]. Table 2 presents the number of disabled persons per Province. KwaZulu-Natal had the highest number at [470 588] while the Northern Cape had the lowest number at [46 973]. In terms of prevalence, Free State had the highest

percentage at [6,8 per cent]. The Province with the lowest prevalence of disability were Western Cape at 4,1 per cent and Gauteng at 3,8 per cent.

Table 2: Number of disabled persons by province and sex

Province	Number			Percentage		
	Male	Female	Total	Male	Female	Total
Western Cape	96 549	90 301	186 850	4,4	3,9	4,1
Eastern Cape	173 229	199 037	372 266	5,8	5,8	5,8
Northern Cape	23 620	23 353	46 973	5,9	5,5	5,7
Free State	87 758	97 619	195 377	6,8	6,9	6,8
KwaZulu-Natal	219 685	250 903	470 588	5,0	5,0	5,0
North-West	105 169	106 054	211 223	5,8	5,7	5,8
Gauteng	164 588	167 023	331 611	3,7	3,8	3,8
Mpumalanga	87 319	94 874	182 193	5,8	5,8	5,8
Limpopo	124 128	144 774	268 902	5,2	5,0	5,1
South Africa	**1082 043**	**1 173 939**	**2 255 982**	**5,1**	**5,0**	**5,0**

Source: Stats South Africa, 2005

In terms of the percentage of disabled people who are affected by the various types of disabilities as at 2001, Table 3 summarises the figures. The prevalence of sight disability was the highest [32 per cent], followed by physical disability at [12 per cent] and lastly communication disability at [7 percent]. In addition, a higher percentage of disabled males [31 per cent] suffered from physical disabilities while 36 per cent females suffered from problems related to sight.

Table 3: Percentages of disabled persons by type of disability

Type of Disability	Male	Female	Total
Sight	28,3	35,6	32,1
Hearing	19,4	20,7	20,1
Communication	7,2	5,8	6,5
Physical	30,7	28,6	29,6
Intellectual	13,5	11,3	12,4
Emotional	17,3	14,3	15,7

Source: Stats South Africa, 2005

Table 4 below presents the fact that disability is much higher in urban areas than rural areas. However, this may be because of better reporting systems and capturing systems in urban areas than in rural areas. Table 4 suggests that when disability rates (crude or standardised) are high, female disability rates are also high.

Table 4: Total disability rates by place of residence

Total crude disability rates				Total standardised disability rates			Ratio Males to Females	
	Male	Female	Total	Male	Female	Total	Crude	Standard
Place of residence								
Urban	6,69	7,48	7,12	13,27	13,51	13,43	0,89	0,98
Rural	6,12	6,77	6,46	10,30	11,04	10,67	0,90	0,93

Source: Computed from the 1996 micro-data

The section that follows is dedicated to a detailed analysis of the rural case study on PWD in Mpumalanga province.

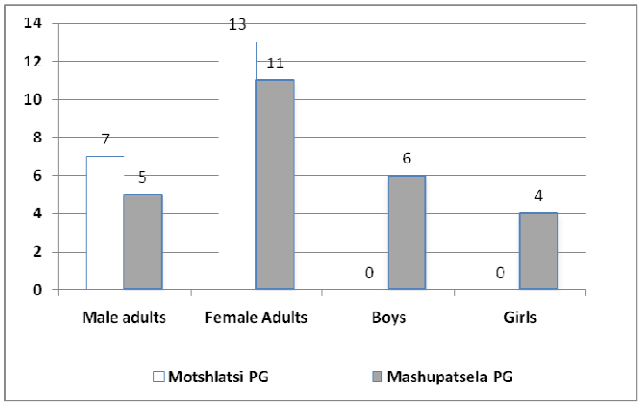
Mothlatsi Protective Workshop Group [Leroro] & Mashupatsela Project [Moremela]

The Mothlatsi group is located in Leroro Village in Thaba Chewu Local Municipality. The group was formed in 2003 and is funded by the DSD. Mashupatsela project is located in Moremela and was formed at approximately the same time as the other

group. However the group is not as galvanised as the Leroro group. It was reported that they last met in August 2009 when food supplies had not been exhausted. The DSD provide a quarterly allowance of R9618 for food to the disabled groups.

Demographics of the PWD groups

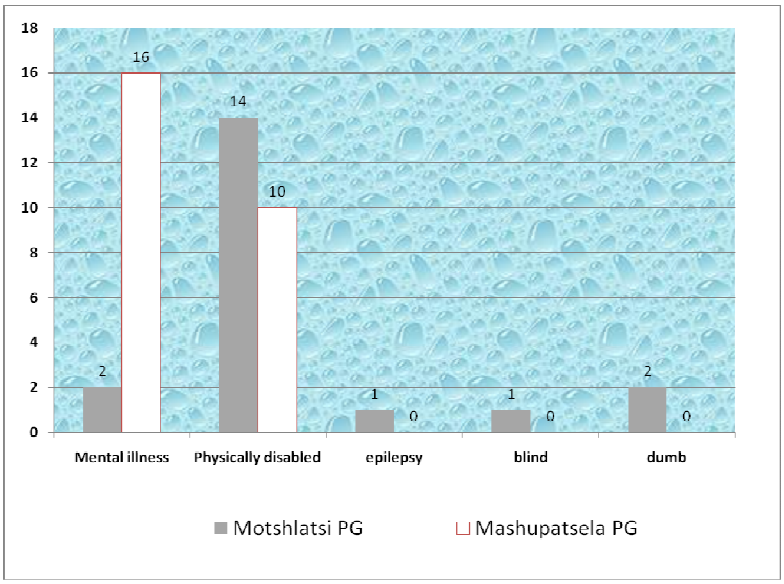
The Mothlatsi Protective Workshop Group officially has 20 registered members. The ages of the members range from 18 years and above. However, there are some members of the community who fall under PWD who are not part of this group. The group comprises of 13 women and 7 men. The Mashupatsela project group has 26 members and not all of them come to the centre due to transport problems and some do not have wheelchairs. However, there were reports that some of them refuse to use wheelchairs and want to live normal lives. Within the group 10 are children [6 boys and 4 girls] and 16 are adults. In terms of gender 11 are males and 15 are females. One of the children [15 years] dropped out of school due to sickness and the rest are attending the nearest primary school. All the members of the group live with someone at home. Graph 1 presents these issues graphically.



Graph 1: Demographic Characteristics of Mothlatsi & Mashupatsela PWD Groups

Causes of disability

In Mothlatsi the majority of the disabilities are from birth [17 out of 20]. There are 3 with injury related disabilities – 2 men and 1 woman. Of the two men, one was involved in a car accident and the other is a work related accident. The lady's disability is due to sickness. In Mashupatsela two of the children are mentally ill. Some of the members are physically okay but have mental illness. PWDs also suffer from other illnesses such as sugar diabetes, high blood pressure etc. Graph 2 presents the causes of disability graphically. It is also important to realise that persons with multiple disabilities i.e. more than one disability e.g. one who cannot speak and hear or has a physical disability in addition to a



Graph 2: Causes of disability in the study area

mental disability were many especially in the Mashupatsela group were persons with a mental disability were also chronic patients.

An extract from an in-depth interview with one of the project participants summarises how disability can be a life course transport issue.

"…I was born in 1957 at Burgersfort. I used to work as a miner at Frankfort Mine 26 years ago before I got an injury. I got injured at work by a big rock that fell on my leg. I was very luck to survive the rock. Ever since the injury I could no longer do hard physical work. I have three daughters; two are grown up and are working in Pretoria. I now live with my thirteen year old last born and a one month old grandchild; both depend on me. My wife is not working and this makes it even harder to support the whole family out of a disability grant given my disability situation. I can do work but nobody would like to employ me. As you can see, I managed to plaster the whole house by myself with this disability of mine. Even if it is not for money, I would like to keep myself busy with work so that I keep my strength going. Since my injury, I developed a number of sicknesses; I have High Blood Pressure. I have to go to the clinic every month to get pills and to get checked. I cannot walk up to the clinic; I have to hire a private car and it normally cost between R50 and R100 depending on the time of the day and the understanding that the driver or the owner has…"

Transcript of an interview involving the life history of an Home Based Care [HBC] patient, Jacob Makhubedu, – March 2007

Facilities for PWD

Although the Mothlatsi group was formed in 2003, the building they use is made of wooden materials and has windows with no protective burglar bars. The building comprises a kitchen and an open room for getting together where the PWD eat, and conduct meetings. The toilet is situated approximately 20 meters from the building. A piped water facility exists on-site. However energy is a challenge for cooking and lighting and instead use fuel wood and candles/lamps respectively [refer to picture 1].

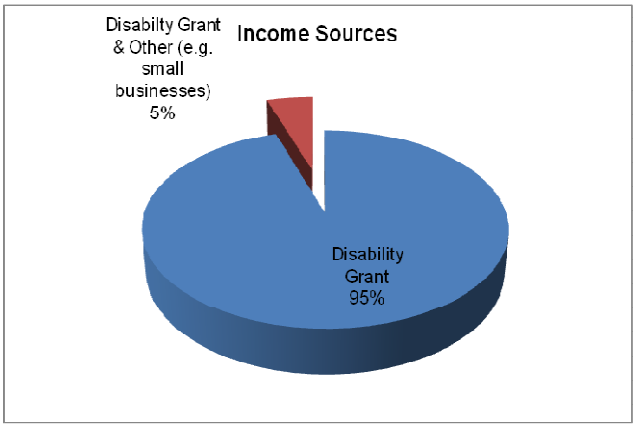
Picture 1: Mothlatsi & Mashupatsela Centres For Disabled showing backyard food gardens; food kitchen and some of the arts and crafts they make

The group faces security challenges. Thievery and burglary are common when they buy their stocks after getting their Disability Grant [DG] from DSD. People break in and steal their belongings. During the visit the windows had just been broken by some people who took away the craft works and other items of the group. The security plight is worsened by the fact that the group do not employ anyone to guard the premises. The group suggested that constructing a modern brick and mortar structure with standard security windows and doors is one practical way of alleviating the problem.

Given the lack of security at the premises, members are forced to carry the tools (e.g. hoes, picks, shovels etc) everyday to and from the centre. This was reported to be a strenuous and difficult task for them. The DSD has advised the disabled groups to source funds from elsewhere for purposes of constructing a more secure structure.

Income sources

The major and usually sole income source for the group members is the DG of R1010 per month that they receive from DSD [Refer to Pie Chart 1]. Even those not registered with the centre receive a similar grant from DSD. However, during focused group discussions it was reported that there is one PWD who is currently not receiving the DG because the DSD require medical certification by a doctor confirming disability to justify eligibility to receive the grant. This PWD has to be examined by the doctor at a hospital physically before the doctor can issue out a certifying letter of disability. This is a challenge for the person as there is no one in the community responsible for PWD secretarial services to facilitate easy accesses to the DG. This places tremendous burdens on PWD as they struggle usually on their own to find out the requirements and procedure to be followed in order for one to qualify for the DG.



Pie Chart 1: Income Sources for PWD in the study area

In Mashupatsela the sole income source for the group members is the DG of R1010 and R650 per month for adults and children respectively that they get from DSD. Parents collect the DG on behalf of their children. However, there are reports that money collected on behalf of the children is not used for the welfare of the children. For example, some children are reported not to have shoes despite the fact that every month their parents collect their DG on their behalf.

Within this Mothlatsi group, there is one woman who was in a wheelchair who has a small business [selling airtime, providing typing and printing services such as for CVs]. She operates from her home. Her vision is to become a successful businesswoman. However, she indicated that at the beginning people did not believe that she could provide quality typing and printing services for them. However, with time that stigma has fizzled out. She currently commands a steady flow of business requiring her services. In terms of selling airtime, she reported that there is a lot of competition and sometimes people leave her because of her condition.

Despite the DG, there are no other income sources for most of the PWDs in the community. They reported that, the main activity in the area is forestry and the work opportunities there are physical thereby disadvantaging them. In addition, they argued that work opportunities that are advertised, are usually situated in distant

places that require them to travel and this is a challenge for them. Furthermore, although posts are advertised for PWDs, they require higher qualifications and skills that the group members do not possess. Although labour-based opportunities exist for PWD, however expanded public works programme [EPWP] community projects are not applicable for them. This is because they require physically fit people to do physical work. An example they gave was in the forestry sector where a PWD would be required to sharpen cutting equipment [which they reported having no problem performing]; however, getting to the forestry work site is a challenge for them [usually the work site is located on the valley of a very steep mountainous area – since no cable car or elevator is provided to link the top of the mountain and the valley for the disabled person].

They further reported that the R1010 they get from DSD is little as it is spread over numerous household needs. For example, the money is used to pay school fees for children and cover household expenses. In addition, they argued that PWDs find themselves with more needs such as special beds, tables, chairs, stoves etc. Procuring such equipment is a bit expensive and requires more financial resources. However contrary, some few respondents argued that the grant was adequate as aptly summarised by the extract from an interview below:

"…..I do not know for the others. I am okay. Look, life in a rural area is not that very expensive. Remember too that I am a PWD. I do not move a lot, or engage in extravagant money consuming activities and lifestyle. Besides I also have my own small enterprise that keeps me busy and provides some steady inflows of income. In fact I have a vision of one day being a very successful businesswoman ……."

Extract of an interview with a PWD who uses a wheelchair and possessed the latest Black Berry Top of the Range Cell Phone [i.e. currently one of the most expensive cell phones available on the market] for communication, 18th February, 2010, Leroro

Economic activities

The two groups do not have an established commercial business activity. However a food gardens at the back of their yards are operated where different crops are grown. For example, at the time of the visit, the garden at the Mothlatsi group had a very good maize crop. Furthermore, the group has been trained in arts and crafts by one member of the community who volunteered to help them [refer to picture 1]. However, the arts and crafts industry is currently not operated on a commercial scale due to lack of capital to source required inputs for mass production purposes. With financial resources and a business plan, this could prove to be a lucrative income generating activity for the group that can tap into the high tourism business in the region.

The Mashupatsela group also has a food garden at the back of their yard that they use to grow different crops. Further, the group has arts and crafts skills [they can do beads] and can make curtains from samba chips plastics, although they are not producing anything commercially. There were also three sewing machines at the centre; however, no one uses them. One member of the group is a cameraman and takes photos.

Institutes helping PWD groups

The groups receive different kinds of help from DSD such as a group and individual grants. The Disabled People of South Africa [DPSA] – helps with identification of equipment required for different categories of PWDs. They source equipment matched to the PWD specifications and further check for equipment that needs replacement owing to wear, tear and or damage. However, the group reported that usually it takes more than a year for one to get his/her equipment replaced. There is also a physiotherapist who comes from Lydenburg once every two to three months. However the last visit by the physiotherapist was in October 2009. The focused group discussion was conducted in February 2010. These institutions also assist other PWD not registered with the group. The group also works in collaboration with Moholoholo Group and sometimes asks for their care giver to come and help them.

Transport challenges for PWD

The Mothlatsi group members face various transport related challenges. For example, getting to the group meeting place is not easy. PWD hire cars to transport them and they are charged R1200 every month to be transported to the group meeting place. The car was reported not to be reliable and is usually late to pick them. They reported that they also face challenges with public transport especially boarding and alighting. They say that people do not understand them and have negative attitude towards them. One lady in a wheelchair reported that she has to pay 3 fares each time she travels to town [one way] [one for her, for the wheelchair and for the accompanying person]. This makes it very expensive for the PWDs to travel. In terms of alighting, they are usually dropped far away from their places of residence. Usually it is very difficult to walk from the road to their homesteads. They also reported that taxi people have a bad attitude towards them. Sometimes they leave them on the road and pick able bodied people. This practice is prevalent during peak hours, weekends and holidays when commuters are many. This makes the waiting period for PWDs very long than for other passengers.

Like the Leroro group, this Mashupatsela group also face various transport related challenges. They need to pay R2000 per month to come to the centre. They reported that they also face challenges with public transport especially boarding and alighting. They say that people do not understand them and have negative attitude towards them. One PWD was reported to find difficulties getting transport to go to the hospital to see the physiotherapist. One child was reported to craw to the toilet as the wheelchair cannot enter the toilet [refer to picture 2]. Also the people living with the child just leave food and go away.

Picture 2: Existing Houses are non-conforming to disability access and exit; while the toilet to the extreme right constructed on-site at the Mothlatsi Protective Workshop group shows a way of addressing such travel and transport needs for PWDs

Only one member of both groups has an automated wheelchair and three other women have manual wheelchairs. However, the one with the automated wheelchair faces challenges with the battery, she got the wheelchair in 2006 and now the battery can't sustain her for a day. Sometimes she has to stay at home if the battery is not charged. Other challenges she faces include failure to get in some buildings which have steps and no facilities for her to enter using the wheelchair especially when she goes shopping in town. For those with manual wheelchairs travelling around is very difficult if there is no one to push you. It is also an exhausting exercise for the one who will be pushing given that there are no well formed local access roads/footpaths for PWDs to use in the community. They reported that pushing the wheelchair is not easy given the steep and rough earth formed gravel roads. This perhaps explains why most PWD park and store wheelchairs instead of using them. Wheelchair interventions in rural remote and steep terrain areas require complementary infrastructure development for optimal use such as paved local level access roads/wheelchair footpaths [refer to picture 3]. While focusing on travel and movement patterns off-site from the residential areas inhabited by PWDs is important, it is perhaps equally important to also focus more sharply on improving on-site travel and transport requirements for PWDs. The study confirmed and discovered that independent movement of PWDs within their premises still remains a challenge. This mainly owes to the unfriendly socio-economic facilities available e.g. disability non-conforming toilets, bathrooms, kitchens in terms of design, access and exit provision; entrances with steps [at times very steep and high] rather than ramp provision, toilets designed without any consideration for wheelchair users etc [refer to picture 3].

Picture 3: Depicts PWDs caring for each other and walking making use of clutches; a mother helping sit a disabled child onto the wheelchair; a home interview with a PWD and a folded wheelchair gathering dust by not being used by the owner and the difficult and rugged terrain PWDs have to traverse

The PWDs do need transport usually to go for monthly check up at the hospital and sometimes to town for shopping [to Graskop about 50km away from the village]. They also require transport to go to receive monthly grant at the hall which cost them between R35 and R50 [hired cars] per person. One terminally ill PWD reported visiting the hospital twice for medical check ups in a month. Each return trip's cost for hiring transport is R200. This represents 20% of the disability grant spend on transport cost to access health services. No wonder why the bulk of PWD were reported to be home bound or reported that they seldom engage in social or leisure trips.

The life story below summarises the transport and spatial socio-economic access and mobility challenges that a typical PWD can face especially in deep rural areas of South Africa.

"…I was born in 1942 at Nyokosela. When I applied for the ID document the Home Affairs people refused to accept my birth dates and said I was born in 1955. This has delayed me in getting pension money. I was born with walking and speech disabilities. I have never been to

school due to these reasons. I have never given up on walking and in fact, I have always tried to find better solutions for my problem. As you can see, I now have *walk sticks* [crutches] that the home-based carers organised for me and I hope I will soon be getting a wheelchair with their help. The home-based carers have also helped me to get my disability grant – it is the only source of income that has saved my life. My childhood friends were also supportive of my situation when I was still growing up. I lost my parents when I was still young and this changed my life drastically, especially when my mother passed away. She was the pillar of my life – the only person who could touch me with true and unconditional love. Moving from one place to another is very cumbersome especially when I have to catch public transport. The home-based carers normally hire a car privately to take me to hospital for medical checkups and treatment. They also assist me with collecting wood for fire since I do not have electricity. I am thankful for what they do – I do not know where I would be without them..."

Transcript of an interview involving the life history of an HBC patient, Feni Mogane – March 2007

However, regarding transport information and communication signs, an interesting discovery was that PWD in rural areas said unlike when in a major urban area/centre like Johannesburg travel information and communication is not a challenge. The rural community is small, compact and public transport operators almost know every PWD by name. This, they argued changes the travel and movement service provided for PWD. The form of treatment and travel experiences for PWDs in the rural areas although requiring improvement was not as bad as what they experienced when they visit major metropolitan centres. They reckoned that drivers in Gauteng province are likely to be more aggressive, less tolerant given the absence of some functional and known extended kinship and social ties/relationships.

Sports & Recreational Facilities for PWD

The group indicated that they are interested in sports; however, there are no facilities in the community that caters for PWDs.

Typical Dependent PWD day's diary

*W*ake up; clean houses, bath, come to the centre; at the centre do arts and crafts/ work in the food garden at the back of the facility (arrive at 0900hrs and knock off at 1600hrs). On Saturdays they do household chores and relaxing at home and on Sundays they go to church. The table below summarises the typical travel and movement weekday and weekend dairy for PWD.

WEEKEDAYS [MONDAY – FRIDAY]			
Time	Activity	Travel and Movement implications	Potential Strategies, options and interventions
07h15	Wake up and prepare for the day	From bedroom to bathroom; kitchen and back to bedroom [if independent easier but if dependent need to wait for helper]	Automatic wheelchair; special beds, chairs and stoves to facilitate greater independence and freedom of PWDs On-site facilities infrastructure improvement for PWDs compliance
08h00	Depart for PWD Group Premises; Engage in artwork and craft production throughout the	From residence to PWD facility/location; From inside home to pick up point on access road; wait for hired PWD transport to pick you up; From pick up point on access road	Place change locations facilitate socialisation and relaxation as PWD care and support each other; Waiting facilities for PWD at roadside; Disabled group special transport needs vehicles;

	day	into pick up van/vehicle; From pick-up vehicle back to access road to PWD facility Movement within premises such as from main office to kitchen, toilet and food garden Return trip for all the above	Robust and independent friendly wheelchairs and aids; Pavement of access roads and PWD design compliant premises; Training and awareness of transport operators that provide services to PWDs
16h00	Knock off and go home	Return home by taxi or hired car if available; travel to home premises [for those independent] or send word for helper to come and assist; wait for helper; Pushed to premises	Access road pavements; communication signal and message system e.g. use cell phones or radio communication systems; appropriate travel and movement equipment
17h00	Arrive home	Seated on respective area; Engage in home activities; watch and see helper engaging in home activities	Special seats; special stove; Home activity recreational and leisure activities/facilities/gadgets
19h00	Supper	Served with supper if not independent or serve others supper if independent	Feeding assistance tools; Frail or elderly training and manuals
20h00	Go to Bed	Clean plates and tidy house before sleeping; Go to bedroom and sleep; Avoid too much fluid intake for non-independent PWD; Normally do not sleep early although go bed early	Travel, movement and bed equipment for PWDs
During weekend the diary may vary but will include watching and hearing relatives and friends preparing to go for Church and breakfast. Usually asked to contribute and suggest which meals can be prepared. This happens between 06h15 and 08h00 in the morning. Afterwards bathed and clothed and placed on the wheelchair. By 9a.m. seated in the front row/sections of the Church. Love expression from community of faith visible. Sometimes receive “love offering” and gifts from Church. Pushed back home usually by Church members after end of service at 12h00. From 12h00 to 15h00 returned home and sometimes left alone. This is a reminder of the isolation, loneliness and helplessness to a PWD. Relatives and children usually go for after Sunday service activity and served cold food at best. Between 15h00 and 18h00 family members return and good clothes are removed from PWD and hanged neatly for re-use next weekend. This is one typical extreme weekend for a dependent PWD.			

The typical PWDs day travel and movement dairy presents both the transport and non-transport challenges faced by the group. These range from implied, perceived, imagined, reinforced and experienced forms of social exclusion, stigmatisation, abuse and humiliation. Indeed although all interviewed PWDs indicated that they desire to be independent, it is presented that levels of independence vary by hour of day, place, activity and day of the week. It may be crucial that a life course and day dairy PWD interventions be generated. These will relate to supporting PWD transport and non-transport requirements throughout the day, week and responding to the total fulcrum of mobile travel and movement requirements for PWDs.

Role of HBC workers

Assisting PWDs e.g. with household chores. They help them laugh and relax to reduce stress.

CONCLUDING REMARKS

The lack of knowledge and understanding about the extent of exclusion of persons with disabilities among decision-makers, donors, international agencies, governments and other development actors, and the lack of recognition of disability as a crosscutting issue has resulted in the low priority given to disability within mainstream development. The increasing numbers of people with disabilities needs to be factored into plans for poverty reduction moving towards 2015 and beyond. Perhaps research and development aimed at implementing an enhanced transport

infrastructure and development project in a rural area is one way of restructuring and transforming approaches and intervention options tackling the head line issues of PWD in rural areas. This could be a good starting point for speculating a responsive rural transport and development agenda in South Africa and developing countries generally. It may not be too ambitious to argue that more resources and funding need to be channelled in this emerging research and policy area that is still largely under-researched, under-developed and thereby by extension under-represented.

It is important that wheelchair interventions be complemented by development and provision of well paved pedestrian/wheelchair paths; PWD friendly access and exit rumps/platforms in public building [e.g. toilets, banks, hospitals, schools] as well as private residences etc if the technologies are to be used by PWD. Otherwise PWD in rural areas will remain travel dependent. In addition the amount of awareness and capacity building required regarding PWD in rural areas may be much more than what is required and envisaged in urban areas. This is so given the multiple challenges and disabilities common in rural areas inhabitants. The unique nature of rural areas exhibiting conditions such as extreme poverty, low and weak infrastructure provision, weak institutional and organisational sett-up for PWD, deeply rooted negative attitudes towards PWD require overcoming. Indeed improved mobility can play a significant role towards levelling the playing field for PWD in the appropriate and responsive transport and non-transport interventions thereby enabling equitable participation.

The summation of the study is that in rural areas “wheelchair, walking sticks/roads and special shoes” are not enough. Approaches that treat rural areas as extensions and by corollary photocopies of urban areas risk failing to make significant contribution to resolving rural travel and mobility challenges. Instead such approaches will perpetuate the “white elephant’ status of wheelchairs and equipment that are shelved. Research and development perhaps needs to focus more on an interactive user group participatory approach that places rural disabled people at the centre of the interventions designing, production and manufacturing including maintenance as a tripartite activity. First, this is another rural area window opportunity for skills transfer and development. Secondly, this can be a recipe for the provision of a user-friendly inclusive design methodology that is sensitive to rural travel and mobility constraints and opportunities for PWDs. Thirdly this can be an opportunity for developing local capacity in the production and manufacturing of equipment and aids for PWDs as a secondary industry. Fourthly, there is an opportunity for chaining out a supportive service industry sector from this. This can be a starting point for encouraging diversification and mainstreaming of PWDs in socio-economic opportunities in their environments. The whole travel and transport interventions for PWD should be treated as a value chain that provides opportunities at each stage for mainstreaming economic and social integration of the PWDs. This brings the argument for conducting a life cycle analysis of the whole PWD travel and transport value chain. Perhaps involving them in the design of rural wheelchairs appropriate for rough and rugged terrain rather than the exportation of the universal wheelchair may be necessary. PWDs explained that crawling or staggering with a walking stick /clutches is miles better than the discomfort and risk of falling and injury than can be accompanied with the use of the wheelchair especially if you are to use it independently. Perhaps there is need to design a multi-purpose wheelchair with capacity to adapt to different transport conditions.

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