



Kenya National Survey for Persons with Disabilities

Preliminary Report



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March 2008

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Kenya National Survey for Persons with Disabilities – Preliminary Report

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List of Abbreviations

ADL	Activities of daily living	MOEST	Ministry of Education, Science and Technology
APDK	Association for the Physically Disabled of Kenya	MOH	Ministry of Health
DFID	Department for International Development	NASSEP	National Sample Survey and Evaluation Programme
IDP	International Development Project	NCAPD	National Coordinating Agency for Population and Development
KNBS	Kenya National Bureau of Statistics	PWDs	Persons with disabilities
KNSPWD	Kenya National Survey for Persons with Disabilities	SPSS	Statistical Package for Social Studies
KPDP	Kenya Programme of Disabled Persons	STATCAP	Statistical Capacity Building Project
MGSCSS	Ministry of Gender, Sports, Culture and Social Services	TOT	Training of trainers
		UDPK	United Disabled Persons of Kenya



Acknowledgements

The 2007 Kenya National Survey for Persons with Disabilities (KNSPWD) aimed at getting up-to-date information on persons with disability for purposes of planning, monitoring and evaluation of programmes.

The survey specifically estimated the number of PWDs, their distribution in the country, the nature, types and causes of their disabilities, the problems they face, and the coping mechanisms they use. The survey interviewed PWDs of all ages in sampled areas to get these estimates and sought their knowledge of available services and their perceptions of community members' attitudes towards PWDs as well as the attitudes of community members themselves.

The Ministry of Planning and National Development, through the National Coordinating Agency for Population and Development (NCAPD) and the Kenya National Bureau of Statistics (KNBS), wishes to acknowledge the KNSPWD Steering Committee for its effective policy guidance and oversight of the survey. We thank as well the KNSPWD Technical Committee members for their valuable technical input in the planning and development of the survey instruments used in the collection of information, in addition to facilitating data collection and analysis and the writing of this report.

Special thanks go to the Regional Population Coordinators, District Statistical Officers and the Division of Child Health for coordinating all the activities that led to the successful implementation of the survey. In particular, we

express our gratitude for the work done by the interviewers and drivers who collected the information.

We want to mention in a special way all the respondents countrywide who provided the information needed to accomplish the objectives of this survey. Without their cooperation, the survey would not have been possible.

We sincerely appreciate the financial and technical support given by the Department for International Development (DFID), the World Bank, the United States Agency for International Development (USAID) and the United Nations Population Fund (UNFPA).

Dr. Boniface K'Oyuigi

Chief Executive Officer
National Coordinating Agency for Population and Development



Executive Summary

Over the years, there have been unsuccessful attempts in Kenya to determine the disability status through national censuses and studies by civil societies, non-government organizations and government. Lack of evidence-based data on the nature and extent of disabilities as well as other factors that affect persons with disabilities (PWDs) in Kenya has therefore posed challenges in terms of planning.

The Kenya National Survey for Persons with Disabilities (KNSPWD) was designed to provide up-to-date information for planning, monitoring and evaluating the various activities, programmes and projects geared towards improving the wellbeing of PWDs.

Data Collection

The information collected included an estimation of the number of PWDs; their distribution, demographic, socio-economic and cultural characteristics; the nature, types and causes of disabilities; coping mechanisms; and the nature of services available to them.

This preliminary report presents key findings of the household-based interviews conducted during the survey. The household survey utilized a two-stage cluster sampling design. Out of the 1,800 clusters maintained by the KNBS, 600 clusters were selected; of these 436 were rural and 164 were urban. A systematic random sample of 25 households per cluster was selected, resulting in a sample size of 15,000 households. Successful interviews were conducted with 97% of the sampled households, while 96% of PWDs were interviewed.

KNSPWD found that

- 4.6% of Kenyans experience some form of disability.
- More disabled persons reside in rural than in urban areas.
- 15% of PWDs are likely to be affected by environmental factors on a daily basis and 3% on a weekly basis.
- 65% of PWDs regard the environment as major problem in their daily lives.
- A quarter of PWDs work in family businesses, but a third do not work at all.
- 16% women with disability aged 12–49 years use some form of family planning.

Key Findings

- The most common forms of disabilities in Kenya are associated with chronic respiratory diseases, cancer, diabetes, malnutrition, HIV/AIDS, other infectious diseases, and injuries such as those from road accidents, falls, land mines and violence.
- Six functional classifications of disabilities were used to compute the prevalence rate of disability. The question to the respondents focused on the individual's experience with or without use of assistive devices or support services. The overall disability rate was 4.6%. Overall, nine in ten PWDs found disability without assistive devices a big problem.
- Activity limitation refers to difficulties experienced by an individual in the absence of any kind of assistance. The data indicate that

Attitudes displayed by the people around them can be a bigger problem for PWDs than the medical condition they must cope with: People living and interacting with PWDs tend to treat them differently in relation to their disabilities.

PWDs who are unable to carry out their daily activities were more likely to be residing in rural areas (9%) than in urban areas (4%).

- The accessibility of the immediate surroundings plays an important role in PWDs' participation in various activities. The survey shows that about 15% of PWDs are likely to be affected by environmental factors on a daily basis and 3% on a weekly basis. Three out of five (65%) PWDs mentioned the environment as major problem in their daily lives.
- A third of the PWDs worked on own family business with a quarter doing no work. About 16% worked for pay and one out of ten indicated that they were homemakers. The survey found that a third of PWDs use an assistive device or support service. Out of this proportion, one in five uses an information device while 12% use a personal mobility device.
- Overall, nine in ten PWDs are aware of the health care services available, but more PWDs

in urban areas (95%) were likely to be aware of health services than their rural counterparts (86%). However, PWDs residing in the urban areas are less likely to have needed health services (72%), compared with their rural counterparts (79%). Use of family planning was found to be 16% for female PWDs aged 12 to 49 years.

Although more detailed information will be available in the main report of the KNSPWD, this preliminary report provides a sound basis for policy makers and programme managers to use in setting priorities.

Collaborating Organizations

The KNSPWD was undertaken by the National Coordinating Agency for Population and Development (NCAPD) in collaboration with the Kenya National Bureau of Statistics (KNBS), the Ministry of Health, Ministry of Education, Ministry of Gender, Culture and Social Services, and an array of organizations for or of persons with disabilities. Technical and financial support for the survey came from the Department for International Development (DFID), the World Bank and the United States Agency for International Development (USAID) under the STATCAP project. The United Nations Population Fund (UNFPA) provided support for the design of the survey instruments.



1. Background

According to the World Health Organization (WHO), disability affects 10% of every population. An estimated 650 million people worldwide, of whom 200 million are children, experience some form of disability. Surveys conducted in 55 countries by the Disability Statistics Compendium show prevalence rates varying from 0.2% to 21%.

Longer viewed as merely the result of impairment, disability has many causes. Today, the most common form of disabilities are associated with chronic respiratory diseases, cancer, diabetes,

KNSPWD looked into

- w The numbers and distribution of PWDs
- w The demographic, socio-economic and socio-cultural characteristics of PWDs
- w The nature, types and causes of the disabilities in the country
- w Specific problems faced by persons with disability by gender
- w Coping mechanisms and needs of PWDs
- w The nature of services and rehabilitation programmes available for PWDs by type

Agencies Collaborating on KNSPWD

1. National Coordinating Agency for Population and Development (NCAPD)
2. Kenya National Bureau of Statistics (KNBS)
3. Ministry of Gender, Sports, Culture and Social Services (MGSCSS)
4. Ministry of Health (MOH)
5. Ministry of Education, Science and Technology (MOEST)
6. United Disabled Persons of Kenya (UDPK)
7. Kenya Programmes of Disabled Persons (KPDP)
8. Association for the Physically Disabled of Kenya (APDK)
9. Africa Mental Health Foundation (AMHF)
10. International Development Project (IDP)
11. Department for International Development (DFID)
12. World Bank (WB)

malnutrition, HIV/AIDS, other infectious diseases, and injuries such as those due to road accidents, falls, land mines and violence. The number of people living with disabilities is growing as a result of factors such as population increase, aging, and medical advances that preserve and prolong life. This has in turn increased the demand for health and rehabilitation services.

Disability is both a cause and a consequence of poverty. About 80% of the world's persons with disabilities (PWDs) live in low income countries where they experience social and economic disadvantages and denial of rights. Their lives are made more difficult by the way society interprets and reacts to disability. In addition to this, environmental barriers and poor policies exacerbate the impact of disability.

Even though there have been different efforts in Kenya to determine the disability status through census and surveys by civil societies, NGOs and Government, these efforts have not been conclusive. Lack of evidence-based data on the

nature and extent of disabilities as well as other factors that affect Kenyan PWDs has posed challenges in terms of planning for this segment of the population. The available data from small-scale studies and special rehabilitation/educational institutions has never been adequate to give a complete picture of Kenya's PWDs.

The Kenya National Survey for Persons with Disabilities (KNSPWD) intended to change that scenario, and to provide stakeholders with up-to-date information for planning, monitoring and evaluating the various activities, programmes and projects geared towards improving the wellbeing of persons with disabilities.



Former Vice President and Minister for Home Affairs, Hon. Moody Awori (in the white hat), flags off the Kenya National Survey for Persons with Disabilities



2. Survey Objectives and Implementation

KNSPWD was a comprehensive, nationwide survey conducted to bridge the gaps in the data about the population of disabled persons in Kenya. The survey entailed interviews with members of nearly 15,000 households across all of Kenya's 69 districts (as per the 1999 population census). This preliminary report presents key findings of the household based interviews, which covered the population residing in households and institutions for/of PWDs in the country. A more comprehensive report will be published by August 2008.

2.1 Survey Objectives

The main objectives of the Kenya National Survey for Persons with Disabilities (KNSPWD) were to:

- w Estimate the numbers of PWDs and their distribution in the country.
- w Examine the demographic, socio-economic and socio-cultural characteristics of PWDs.
- w Determine the nature, types and causes of the disabilities in the country.
- w Identify specific problems faced by persons with disability by sex.
- w Identify coping mechanisms and needs of PWDs.
- w Establish the nature of services and rehabilitation programmes available for PWDs by type.

The survey involved interviews with members of nearly 15,000 households across all of Kenya's 69 districts.

2.2 Survey Instruments and Materials

Various questionnaires and materials were used to collect the data. The questionnaires used in the survey borrowed heavily from international instruments so as to make the methodology and findings of the survey comparable to those of other countries. With the assistance of a lead consultant, a technical group workshop was held to develop the following instruments:

- w **Household questionnaire:** Used to collect background information at the household level and also to screen persons with disabilities by type in the household for subsequent questions in the individual questionnaire.
- w **Individual questionnaire:** Administered to the person(s) with disabilities who had been identified using the household questionnaire. The questionnaire has different sections including: activity limitation; environmental factors; situation analysis; support services; education; employment and income; immediate surrounding; assistive devices; attitudes towards disability; health and general wellbeing; and reproductive health.
- w **Reproductive health questionnaire:** Administered to all eligible females aged 12–49. This questionnaire collected information on reproductive health of females with disabilities.
- w **Institutional questionnaire:** Used to collect information from the heads of the various categories of institutions serving persons with

disabilities. Randomly selected persons with disabilities in these institutions were also interviewed using the individual questionnaire.

w **Focus group discussion guide:** Used to collect qualitative information from a group of 6–10 members of the community in each sampled cluster. The groups comprised PWDs, community leaders, service providers, opinion leaders and teachers. The focus groups elicited information on knowledge, attitudes and beliefs of community members on PWDs and the different services available for PWDs in the different communities.

w **Interviewer and training manual:** Used for training the personnel who conducted the survey and as reference material during the field work.

2.3 Sampling Methodology

The household survey utilized a two-stage cluster sampling design. The first stage of the sampling process involved selecting sample points (clusters) from a national master frame maintained by the Kenya National Bureau of



KNPWD surveyors prepare for their fieldwork



Statistics (i.e., the National Sample Survey and Evaluation Programme IV – NASSEP-IV sampling frame). The list of enumeration areas covered in the 1999 Kenya Population and Housing Census constituted the frame for NASSEP IV sample selection. The second stage of selection involved the systematic sampling of households from a list of all households in the selected clusters.

The National Sample Frame is 1,800 clusters out of which 600 were sampled for the KNSPWD. Of these, 436 were rural clusters and 164 were urban. A systematic random sample of 25 households per cluster was selected for the survey. In total 15,000 households were used for the survey.

The KNSPWD sample was constructed to allow for separate key indicators for each of the eight provinces in Kenya as well as for urban and rural areas separately. This sample is not self-weighting at the national level, consequently all tables except those concerning response rates are based on weighted data.

2.4 Trainings for the Survey

As the first of its kind to be conducted in Kenya, the KNSPWD required a unique training of trainers (TOT) workshop to give trainers a common understanding of the concepts, principles and situations of disability, as well as how to measure the different disabilities and draw a programme for the interviewers training. The workshop equipped the trainers with uniform knowledge and skills that enabled them to systematically understand the flow of the questions and details of the survey instruments. Fifteen

technical officers drawn from the collaborating agencies attended the TOT for two days at the Kenya Institute of Education (KIE) in April 2007.

2.4.1 Pilot Survey

After the TOT workshop, a training team was constituted to facilitate a pilot survey training, which was held in Nakuru in May 2007. All trainers who underwent the TOT course attended the pilot training to enable them to understand the various aspects of the survey process and prepare for the main training. A total of 25 trainees representing 11 local languages was selected for the pilot survey. Each language had two interviewers; the remaining three interviewers served as research assistants and conducted interviews in selected institutions dealing with PWDs.

The main pilot survey objectives included testing KNSPWD materials and instruments to ensure uniform understanding of the terms and definitions so that the interviews were conducted uniformly. The pilot also provided a mechanism for updating the instruments and ensuring they were appropriate for data collection in Kenya. Other objectives were to ensure proper order and flow of the questions, synergize the interview process and build capacity of the pilot survey team.

2.4.2 Main Training of the Interviewers

A countrywide recruitment for research assistants was carried out in June 2007. A newspaper advertisement announcing the opportunity attracted a response of over 3,500 applicants against 130 vacancies, which were filled competitively. The research assistants consisted of social scientists, statisticians and health workers. They included PWDs who met the minimum qualifications. Of the recruits, 128 ultimately qualified to participate in the field work.

The interviewers were trained in Nakuru for two weeks in July 2007. The training programme focused on shared sessions and small group discussions to allow for technical details to be explained better in smaller classes. A number of guest speakers from the disability fraternity and other relevant organizations were invited to give lectures and share their experiences with the trainees on various aspects of disabilities.

2.4.3 Training Methodologies

Different teaching methodologies were applied during the training of interviewers. These were

lectures, classroom teachings in two groups, mock interviews, small group discussions and tests given to evaluate the understanding of the data collection instruments. The interviewers were taken through the survey process: how to ask questions and record different types of responses; application of skip patterns; cancellation of incorrect answers; conducting interviews and definition of terms in reference to different types of disabilities.

Training content covered the following: disability concepts, household characteristics, individual and institutional questionnaires, focus group discussion guide, and reproductive health questionnaire.

2.5 Field Work

Field work for the KNSPWD was conducted from July to November 2007. The 128 interviewers were divided into 18 teams according to the languages spoken in the areas where they were to conduct interviews. Each team had 6–8 members with a driver and a vehicle assigned to them. Each vehicle had a fuel card for areas in which such cards could be used; where this was not the case, money was provided to the team leaders for fuel. The teams were given local language questionnaires plus some in Kiswahili and English to cater for respondents who were not conversant with the local language. The completed questionnaires for each cluster were securely packed and posted to the National Coordinating Agency for Population and Development (NCAPD) headquarters for keying into the computers.

2.6 Data Processing and Analysis

NCAPD availed ten computers for data processing. These computers were installed with SPSS, Nudist and CS-PRO software programmes. Programmes for data entry and analysis were written, edited, and tested. Mechanisms were put in place for adequate data quality control checks. Data entry commenced at the NCAPD headquarters two weeks after the start of the field work so as to ensure the team had sufficient questionnaires for data entry.

2.7 Response Rates

Household and individual interviews in the KNSPWD survey registered responses as summarized in Table 1. A total of 14,569 of the 15,000 sample households was covered, giving

a response rate of 97%. At the individual level, the reproductive health category had an overall response rate of 94%, while the PWD interviews had a response rate of 96%. There was no big difference in response rates between urban and rural areas.

Table 1: Response rates for household and individual interviews

	Sampled	Eligible	Completed	Response rate (%)
Kenya				
Households 15,000	14,962	14,569	97.4*	
Individual reproductive health (females 12–49)	7,402	7,402	6,943	93.8
Individual PWDs	3,224	3,224	3,095	96.0
Rural				
Households 10,900	10,872	10,618	97.7*	
Individual reproductive health (females 12–49)	5,449	5,449	5,140	94.3
Individual PWDs	2,526	2,526	2,429	96.2
Urban				
Households 4,100	4,090	3,951	96.6*	
Individual reproductive health (females 12–49)	1,953	1,953	1,803	92.3
Individual PWDs	698	698	666	95.4

* The household response rate is computed as the number of completed household interviews divided by the number of eligible households, i.e., sampled households minus households that were vacant or destroyed, or where all members were absent.

Source: 2007 KNSPWD.



3. Results

Background characteristics of all the household members and visitors formed the core of the descriptive statistics of the KNSPWD. This information was collected for all those who slept in the household the night before the interview. (This is a standard method used in identification of household members in a survey.) As shown in Table 2, respondents were about evenly divided by sex: 49.6% males and 50.4% females .

Slightly more females (51%) than males (50%) resided in rural areas. There was a higher proportion of males than females at all levels of education.

3.1 Prevalence Rate of Disability

Six functional classifications depicting disabilities were used to compute the prevalence rate of disability. These are impairments that are likely to have a substantial long-term adverse effect that limits a person's participation abilities in certain day-to-day activities. The question to the respondents focused on the individual's experience with or without use of assistive devices or support services.

The hearing question, for example, centred on whether the respondent had difficulties in hearing with or without a hearing aid, while the visual one asked about difficulties seeing with or without spectacles. The question on physical disability dealt with difficulty/inability to move or use certain parts of the body. To determine whether respondents had difficulties in self-care, they were asked whether they had problems carrying out activities of daily living (ADL).

Table 2: Number and percentage distribution of respondents by background characteristics

	Sex				Total number
	Male		Female		
	%	Number	%	Number	
Age group					
0–14	50.0	15,153	50.0	15,176	30,329
15–24	50.5	7,376	49.5	7,244	14,620
25–34	48.1	4,523	51.9	4,880	9,402
35–54	49.2	5,301	50.8	5,473	10,774
55+	49.5	2,359	50.5	2,406	4,765
DK	45.7	365	54.3	435	800
Marital status					
Single	52.6	23,699	47.4	21,368	45,067
Married	48.6	10,487	51.4	11,089	21,576
Divorced/separated	32.0	301	68.0	639	940
Widowed	11.8	296	88.2	2,208	2,504
Other	48.6	294	51.4	311	605
Residence					
Rural	49.5	27,837	50.5	28,413	56,250
Urban	50.1	7,240	49.9	7,201	14,441
Province of residence					
Nairobi	50.6	2,917	49.4	2,852	5,769
Central	48.8	4,229	51.2	4,434	8,663
Coast	50.3	3,085	49.7	3,053	6,137
Eastern	49.0	5,406	51.0	5,625	11,030
North Eastern	52.2	1,305	47.8	1,193	2,498
Nyanza	49.0	5,068	51.0	5,282	10,350
Rift Valley	50.3	8,990	49.7	8,885	17,875
Western	48.7	4,078	51.3	4,291	8,369
Highest level has attended					
Nursery, kindergarten	51.2	1,734	48.8	1,653	3,387
Primary	50.1	17,448	49.9	17,397	34,846
Post prim, vocational	56.0	319	44.0	251	570
Secondary, "A" level	55.4	6,015	44.6	4,850	10,865
College (middle level)	55.7	1,268	44.3	1,007	2,274
University	66.4	473	33.6	239	712
Other	63.5	45	36.5	26	71
DK	61.6	23	38.4	14	38
Total	49.6	35,077	50.4	35,614	70,691

Source: 2007 KNSPWD.

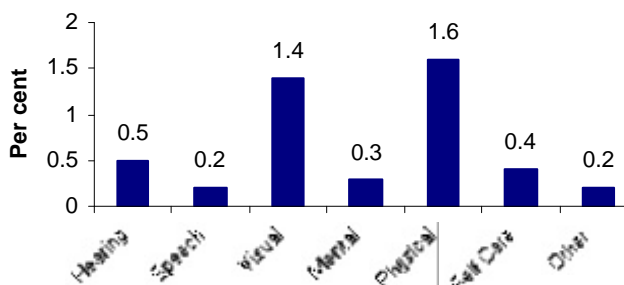
Questionnaires sought information about activity limitation, environmental factors, support services, education, employment and income, immediate surroundings, assistive devices, attitudes towards disability, health and general wellbeing, and reproductive health.

The mental disability question was categorized into two: emotional and cognitive. The emotional one was to determine whether the interviewee had intellectual, emotional or psychological disturbances, problems remembering things, or difficulty being understood. The cognitive question referred to the respondent who had delays in walking, talking, feeding or social interactions or was hyperactive, aggressive or had mannerisms indicating delayed development milestones.

Results in Table 3 and Figure 1 show that the overall disability rate was 4.6%. Of this the largest proportion was physical impairment (1.6%) followed by visual impairment (1.4%). Nyanza

Province had the highest number of PWDs (6.8%), while North Eastern Province had the lowest (2.6%). The data also show that the proportion of PWDs is larger among older people.

Figure 1: Prevalence of disabilities by type



Source: 2007 KNSPWD.

Table 4 indicates that a bigger proportion of males than females suffered from mental disabilities (54% and 46%, respectively) and self-care difficulties (55% of males compared with 45% of females). In contrast, females suffered more compared with males in terms of visual disability, 55% versus 45%, respectively.

Table 3: Prevalence of disabilities by background characteristics

Background characteristics	Type of disability (impairments)									Total	Total disabled
	None	Hearing	Speech	Visual	Mental	Physical	Self-care	Other			
Residence											
Rural	95.5	0.6	0.2	1.2	0.3	1.6	0.4	0.2	100.0	4.5	
Urban	95.4	0.3	0.2	1.9	0.3	1.3	0.4	0.3	100.0	4.6	
Province											
Nairobi	94.9	0.3	0.1	2.7	0.3	1.1	0.3	0.2	100.0	5.1	
Central	94.8	0.5	0.1	1.3	0.5	2.2	0.4	0.2	100.0	5.2	
Coast	94.8	0.8	0.3	1.8	0.3	1.4	0.4	0.2	100.0	5.2	
Eastern	95.0	0.5	0.2	1.5	0.3	1.6	0.5	0.3	100.0	5.0	
N/ Eastern	97.4	0.4	0.1	0.3	0.1	1.2	0.5	0.0	100.0	2.6	
Nyanza	93.2	0.8	0.3	1.9	0.2	2.5	0.6	0.4	100.0	6.8	
R/Valley	96.8	0.4	0.1	0.7	0.2	1.1	0.4	0.3	100.0	3.2	
Western	96.7	0.7	0.2	0.8	0.3	1.2	0.2	0.1	100.0	3.3	
Sex											
Male	95.5	0.6	0.2	1.2	0.3	1.6	0.4	0.2	100.0	4.5	
Female	95.4	0.5	0.2	1.5	0.2	1.6	0.4	0.3	100.0	4.6	
Age											
0-14	97.6	0.5	0.2	0.4	0.1	0.6	0.3	0.2	100.0		
15-24	96.4	0.4	0.2	1.1	0.2	1.1	0.3	0.3	100.0		
25-34	96.0	0.4	0.1	1.1	0.5	1.3	0.3	0.3	100.0		
35-54	93.5	0.4	0.1	2.8	0.4	2.3	0.3	0.2	100.0		
55+	85.3	1.1	0.2	5.1	0.6	6.2	1.0	0.4	100.0		
Don't know	72.5	2.3	0.3	7.4	0.9	11.0	5.4	0.1	100.0		
Marital status											
Not married	96.7	0.5	0.2	0.7	0.3	0.9	0.3	0.3	100.0	3.3	
Married with certificate	92.8	0.5	0.0	3.4	0.1	2.4	0.5	0.2	100.0	7.2	
Married with traditional	94.1	0.6	0.1	2.0	0.3	2.4	0.3	0.3	100.0	5.9	
Consensual marriage	96.7	0.4	0.1	1.2	0.1	1.3	0.2	0.1	100.0	3.3	
Divorced/ separated	89.8	0.7	0.1	1.9	1.7	4.6	1.0	0.1	100.0	10.2	
Widowed	82.9	1.2	0.2	5.7	0.5	7.0	2.1	0.3	100.0	17.1	
Other	98.8	0.5		0.2				0.5	100.0	1.2	
Don't know	84.0			8.1	1.6	6.3			100.0	16.0	

Source: 2007 KNSPWD.

Table 4: Distribution of PWDs by sex and by type of disability

Type of disability	Sex				Total number
	Male		Female		
	%	Number	%	Number	
None	49.6	33,484	50.4	33,959	67,443
Hearing impairment	50.9	194	49.1	187	381
Speech impairment	54.7	71	45.3	59	130
Visual impairment	44.7	438	55.3	543	981
Mental impairment	54.3	103	45.7	87	189
Physical impairment	49.7	550	50.3	556	1,107
Self-care impairment	55.2	157	44.8	128	285
Other	45.5	80	54.5	96	176
Total	49.6	35,077	50.4	35,614	70,691

Source: 2007 KNSWD.

3.2 Assistive Devices and Support Services

Assistive devices and support services consist of equipment and appliances used by PWDs to complement diminished or absence of certain physical functions. Support services are services that PWDs need or receive for their disability in relation to health, rehabilitation and welfare including but not limited to services from a personal assistant or aid.

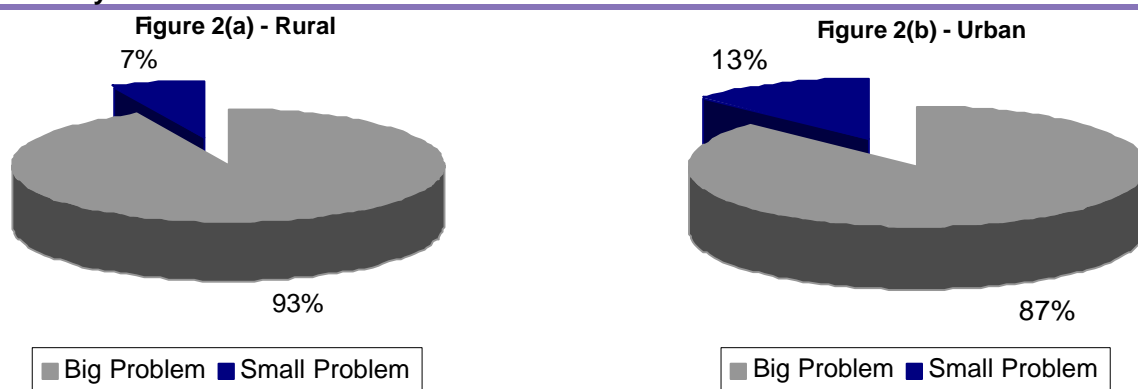
Such devices and services enhance the ability of a PWD to participate in day-to-day activities (Table 5). The KNSPWD looked at various

Table 5: Number and percentage of PWDs using assistive devices/support services by background characteristics

	Any assistive/ supportive device		Information device	Communi- cation device	Personal mobility device	House- hold items device	Personal care & protection device	Handling products & goods device	Computer assisted device
	%	No							
Residence									
Rural	25.9	1,891	11.2	0.1	15.1	0.1	0.3	0.1	0.0
Urban	41.2	500	30.3	0.6	11.0	0.3	0.7	0.0	0.0
Province									
Nairobi	42.4	226	35.0	0.6	7.3	0.0	0.7	0.0	0.0
Central	35.8	370	15.6	0.4	21.0	0.0	0.6	0.0	0.0
Coast	27.6	222	19.4	0.0	8.2	0.0	0.6	0.0	0.0
Eastern	30.1	398	17.4	0.0	13.4	0.0	0.0	0.0	0.0
North Eastern	15.8	52	2.1	0.0	13.7	0.0	0.0	0.0	0.0
Nyanza	24.0	525	10.6	0.4	13.4	0.3	0.4	0.3	0.0
Rift Valley	27.5	416	10.7	0.0	17.3	0.3	0.4	0.0	0.0
Western	20.8	183	7.2	0.0	14.1	0.3	0.4	0.0	0.0
Age group									
0-14	20.4	5	0.0	0.0	20.4	0.0	0.0	0.0	0.0
15-24	15.0	467	12.3	0.3	2.6	0.3	0.3	0.0	0.0
25-34	20.4	356	13.7	0.4	6.5	0.0	0.0	0.0	0.0
35-54	30.8	675	19.3	0.3	11.6	0.0	0.1	0.3	0.0
55+	37.6	676	15.9	0.0	22.8	0.2	0.8	0.0	0.0
Don't know	42.6	212	9.2	0.0	34.3	0.3	1.1	0.0	0.0
Sex									
Male	33.1	1,120	16.1	0.4	17.6	0.2	0.5	0.1	0.0
Female	25.6	1,271	14.4	0.1	11.3	0.1	0.3	0.1	0.0
Marital status									
Single	17.4	695	12.7	0.2	4.8	0.2	0.2	0.0	0.0
Married	35.9	1,174	20.1	0.3	16.6	0.2	0.6	0.1	0.0
Divorced/separated	24.1	90	3.0	0.0	20.2	0.0	0.0	0.0	0.0
Widowed	29.2	420	7.4	0.0	21.8	0.0	0.4	0.0	0.0
Others	68.6	12	40.2	0.0	28.4	0.0	0.0	0.0	0.0
Highest level education attended									
Nursery, kindergarten	9.1	19	0.3	0.0	8.8	0.0	0.0	0.0	0.0
Primary	21.7	1,058	10.0	0.1	12.2	0.1	0.1	0.1	0.0
Post primary, vocational	23.5	21	4.7	0.0	18.9	0.0	0.0	0.0	0.0
Secondary, "A" level	38.9	397	26.9	0.8	11.9	0.4	1.3	0.2	0.0
College (middle level)	71.9	142	63.1	0.0	9.4	0.0	0.5	0.0	0.0
University	89.6	41	83.2	3.1	6.4	0.0	0.0	0.0	0.0
Other	19.6	15	8.9	0.0	10.6	0.0	0.0	0.0	0.0
Don't know	27.2	4	27.2	0.0	27.2	0.0	0.0	0.0	0.0
Total	31.5	1,697	20.1	0.3	11.8	0.1	0.4	0.1	0.0

Source: 2007 KNSPWD.

Figure 2: Distribution of PWDs by perception of disability as it is without use of assistive devices by residence



Source: 2007 KNSPWD.

categories of devices. These include those related to information (hearing aids, magnifying glasses, Braille) and communication (sign language interpreter, portable writer), as well as to personal mobility (wheelchairs, crutches, walking sticks/ frames guide). Others are household items (flashing light on doorbell, amplified telephone); personal care and protection (special fasteners, bath and shower seats, toilet seat raiser); handling goods & products (gripping tongs, aids for opening containers); and computer assisted technology (keyboard for the blind)

As Table 5 indicates, 32% of PWDs use an assistive device or support service. Out of this proportion, one in every five uses an information device while 12% use a personal mobility device. Other devices such as communication aids (0.3%), household items (0.1%), personal care and protection (0.4%), handling products and goods (0.1%), and computer (0.1%) were rarely used.

PWDs in urban areas (41%) were more likely to use an assistive device or support service than their rural counterparts (26%). Similarly they were more exposed to use of information devices (30% for urban versus 11% for rural).

Nairobi had the highest (42%) use of assistive devices or support services compared with other provinces, while North Eastern Province had the lowest (16%). Those PWDs aged 15–24 reported low use of assistive devices (15%). Low use of assistive devices was also recorded among PWDs with nursery or kindergarten level of education (9%).

A third of PWDs use an assistive device or support service. PWDs in urban areas were more likely than their rural counterparts to use these devices and services.

3.3 Situation of PWDs

People with disabilities confront a range of handicapping situations depending on the extent of their disability. Access to infrastructure and services is a big challenge. In Kenya the government and various organizations have tried to put in place systems to minimize handicapping situations faced by PWDs.

Various interventions have proved that it is possible to minimize the degree of handicap and enhance the performance of PWDs, e.g., education policy on integration of PWDs into other learning institutions, and inclusion of service provision to PWDs in the National Health Sector Strategic Plan.

Overall, nine in ten PWDs found disability without assistive devices a big problem. As seen in Figure 2, about 93% of PWDs in rural areas found it a big problem to survive without assistive devices; their urban counterparts were 87%.

Table 6 shows the distribution of PWDs by their perceptions regarding disability without use of assistive devices by background characteristics. Provincial variations existed, with Western (95%) and Nyanza (93%) having the highest proportion of PWDs who found disability a big problem without use of assistive devices. In all provinces, there was generally a very high proportion of PWDs who found disability without assistive devices a big problem.

The age range of 25–34 had the highest proportion of PWDs who found disability without the use of assistive devices a big problem (93%); while the 15–24 bracket had the lowest proportion (90%). Sex differences were minimal; 92% of females against 91% of males found disability without use of assistive devices a big problem.

The survey also found that PWDs who had attained only pre-primary education had the highest proportion (96%) of those who perceived disability without use of assistive devices as a big problem. The proportion reduces with higher educational attainment, declining to 77% among those who had attained university education.

3.4 Activity Limitation

Activity limitation refers to difficulties experienced by an individual without any kind of assistance. Such difficulties can be experienced in any of the following domains of disability: sensory, communication, mobility, self-care (e.g., washing one's self), domestic life, interpersonal behaviour, major life areas in the community and social life.

PWDs may face various challenges in the course of pursuing their daily activities because of activity limitation or restrictions.

This section deals with the extent to which the disability affected the life of the respondents with respect to:

- Their physical capacity to carry out activities without assistance.
- Their ability to participate in the activities in their current environment.

Table 7 shows the percentage of PWDs by activity limitation – in this case going to school – by background characteristics. The survey results indicate that about 4.5% of PWDs were unable to carry out their daily activities and 9% had severe difficulty in performing their activities.

The data also indicate that the PWDs who are unable to carry out their daily activities were likely to be residing in rural areas (9%) as compared with those in urban areas (4%). Also, the highest proportion of PWDs in this category was found in North Eastern (22%), while Nairobi Province recorded the least (4%). Similarly, the survey results showed that the most affected age is 75–79 and the majority are likely to be widowed (19%)

Table 6: Situation of PWDs without use of assistive devices by background characteristics

	Disability as it is without assistive devices					
	Big problem		Small problem		No problem	
	Number	%	Number	%	Number	%
Residence						
Rural	2,270	92.8	176	7.2	1	0
Urban	566	87.3	82	12.6	0	0
Province						
Nairobi	244	87.3	36	12.7	0	0
Central	388	90.9	39	9.1	0	0
Coast	273	89.7	31	10.3	0	0
Eastern	486	92.9	37	7.1	0	0
North Eastern	59	89.4	7	10.6	0	0
Nyanza	628	93.2	45	6.7	1	0.1
Rift Valley	504	91.1	49	8.9	0	0
Western	254	94.7	14	5.3	0	0
Age group						
0–14	645	92.4	53	7.6	0	0
15–24	428	90.4	45	9.4	1	0.1
25–34	331	93.1	25	6.9	0	0
35–54	614	90.5	65	9.5	0	0
55+	615	91.0	61	9.0	0	0
Don't know	203	95.2	10	4.8	0	0
Sex						
Male	1,379	91.9	121	8.1	1	0
Female	1,457	91.4	137	8.6	0	0
Marital status						
Single	1,281	92.2	108	7.7	1	0
Married/Living together	1,074	90.9	107	9.1	0	0
Divorced/separated	81	88.0	11	12.0	0	0
Widowed	388	92.3	32	7.7	0	0
Don't know	11	98.0	0	2.0	0	0
Highest level education attended						
Nursery, kindergarten	94	95.8	4	4.2	0	0
Primary	1,348	92.3	113	7.7	0	0
Post primary, vocational	19	89.1	2	10.9	0	0
Secondary, "A" level	354	86.9	53	13.0	1	0.1
College (middle level)	114	80.1	28	19.9	0	0
University	32	77.2	9	22.8	0	0
Other	20	95.0	1	5.0	0	0
Don't know	4	100.0	0	0	0	0
Total	1,983	90.4	211	9.6	1	0

Source: 2007 KNSPWD.

3.5 Effects of Immediate Surroundings

Physical, mental, intellectual or sensory impairments may interact with various barriers to hinder PWDs' full and effective participation in society on an equal basis with others. Universal designs should enable PWDs to cope with their day-to-day activities with minimal difficulty.

The accessibility of the immediate surroundings plays an important role in PWDs' participation in various activities. Among the aspects of the immediate surroundings that affect the PWDs'

Table 7: Percentage of PWDs by activity limitation and background characteristics – Going to school

	No difficulty	Mild difficulty	Moderate difficulty	Severe difficulty	Unable to carry out the activity	Not applicable	Not specified
Residence							
Rural	21.6	5.6	5.6	4.2	3.8	59.0	0.2
Urban	29.7	4.2	3.5	3.9	1.9	56.5	0.4
Province							
Nairobi	35.2	3.2	2.3	3.7	1.8	53.8	0
Central	30.5	4.2	3.7	3.3	3.2	54.9	0.1
Coast	33.0	7.8	3.0	1.7	3.3	50.0	1.2
Eastern	15.9	6.8	4.3	4.7	3.3	65.0	0
North Eastern	10.4	.9	7.1	1.4	5.5	74.8	0
Nyanza	19.6	3.1	7.1	6.4	2.9	60.6	0.3
Rift Valley	21.9	5.6	5.2	4.2	4.2	58.9	0
Western	18.2	9.8	9.6	2.3	4.7	55.5	0
Age group							
0–14	34.3	13.7	13.8	10.3	5.4	22.1	0.3
15–19	45.2	13.3	11.9	7.1	6.2	16.4	0
20–24	32.8	2.8	8.8	5.0	6.4	44.3	0
Sex							
Male	25.5	5.4	5.9	5.2	3.8	54.0	0.1
Female	21.2	5.3	4.5	3.1	3.0	62.6	0.3
Marital status							
Single	34.1	10.3	10.9	8.4	6.2	30.1	0.2
Married/Living together	17.3	1.7	0.9	0.7	0.9	78.4	0.1
Divorced/separated	15.6	1.5	0	2.5	1.0	79.3	0
Widowed	6.4	0	0	0.2	1.6	91.3	0.6
Don't know	19.3	5.1	0	0	0	75.5	0
Highest level education attended							
Nursery, kindergarten	36.2	18.9	15.3	6.4	7.3	15.0	0.9
Primary	28.9	8.5	7.8	5.6	2.4	46.6	0.1
Post primary, vocational	48.9	5.2	0	0.0	0.0	45.9	.0
Secondary, "A" level	39.9	2.4	4.1	2.4	1.3	49.7	0
College (middle level)	29.5	3.0	2.7	1.1	0.5	63.2	0
University	28.4	0	1.4	0.3	1.1	68.8	0
Other	14.4	6.0	8.7	27.6	13.1	30.1	0
Don't know	0	0	0	16.1	0	83.9	0
Total	31.3	7.2	6.9	4.8	2.4	47.2	0.1

Source: 2007 KNSPWD.



daily activities are crowds, lighting and noise. Table 8 shows how often the immediate surroundings affect PWDs: 15% of PWDs are likely to be affected on a daily basis and 3% on a weekly basis. Three out of five of those affected indicated that the immediate surroundings presented a big problem to their daily life.

The impact was greater in rural areas (16%) than in urban areas (11%) on daily basis. Slightly over a quarter of PWDs in Western Province (26%) are likely to be affected on a daily basis, while the least affected are those in Central Province (7%). In terms of age, PWDs aged 15–24 years (15.5%) and 35–54 (15.4%) were most likely to be affected daily by their immediate surroundings.

Table 8: Effect of immediate surroundings by background characteristics

	How often have other aspects of surroundings made it difficult							Has it been a major problem			
	Daily	Weekly	Monthly	More than monthly	Never	N/A	Not specified	Little problem	Big problem	N/A	Missing
Residence											
Rural	15.5	3.8	5.6	11.0	60.4	3.0	0.6	32.3	63.8	3.8	0.1
Urban	11.4	2.9	8.5	7.1	65.5	3.7	1.0	40.1	53.7	5.4	0.8
Province											
Nairobi	13.3	2.2	7.4	9.8	60.8	5.1	1.5	40.8	54.4	4.0	0.9
Central	7.4	5.9	5.2	13.6	67.7	0.2	0.0	45.5	54.5	0.0	0.0
Coast	13.0	1.2	5.2	5.0	71.9	1.8	1.8	36.0	61.3	1.6	1.1
Eastern	21.1	2.3	5.4	13.0	57.2	0.6	0.4	28.5	65.3	6.2	0.0
N'Eastern	16.0	1.9	0.0	2.2	77.9	0.0	2.1	39.5	60.5	0.0	0.0
Nyanza	13.4	6.9	9.9	12.5	50.3	6.0	1.0	31.1	62.6	6.3	0.0
Rift Valley	11.3	2.5	5.7	6.6	70.1	3.4	0.3	36.2	59.3	4.5	0.0
Western	26.4	1.3	2.8	9.6	55.1	4.8	0.0	25.6	73.4	0.0	1.0
Age group											
0–14	14.9	3.4	3.8	8.2	62.6	6.5	0.7	34.3	62.0	3.7	0.0
15–24	15.5	4.0	8.1	10.5	58.7	1.6	1.5	31.9	62.8	5.3	0.0
25–34	12.4	2.1	5.6	10.5	66.5	2.4	0.4	30.3	60.2	8.8	0.7
35–54	15.4	3.9	6.3	10.3	61.1	2.7	0.3	34.3	63.5	1.9	0.3
55+	12.3	4.2	7.8	11.5	61.7	1.7	0.8	37.3	58.6	3.7	0.4
Don't know	20.6	3.2	6.1	11.1	56.1	2.6	0.4	29.3	67.3	3.4	0.0
Sex											
Male	13.3	3.3	4.3	10.3	64.9	3.3	0.5	34.9	59.6	5.5	0.0
Female	15.9	4.0	8.0	10.1	58.2	2.9	0.8	32.8	63.8	3.0	0.4
Marital status											
Single	14.3	3.3	5.2	10.5	61.5	4.1	1.1	31.8	63.4	4.7	0.2
Married	14.5	3.2	6.4	10.4	63.1	2.2	0.3	35.5	60.2	3.9	0.4
Divorced/ separated	10.6	5.8	1.2	12.7	67.9	1.9	0.0	49.1	42.6	8.3	0.0
Widowed	17.1	5.6	9.7	7.9	56.0	3.0	0.8	32.2	65.3	2.4	0.2
Others	14.1	0.0	22.7	19.1	44.1	0.0	0.0	34.2	65.8	0.0	0.0
Highest level education attended											
Nursery, kindergarten	9.4	1.0	10.5	2.9	66.5	7.7	2.1	26.0	69.8	4.2	0.0
Primary	16.0	3.3	5.5	11.4	60.9	2.5	0.3	36.2	59.5	4.2	0.2
Post primary, vocational	12.0	5.5	3.6	17.8	61.1	0.0	0.0	39.4	46.6	13.9	0.0
Secondary, "A" level	14.1	4.4	6.2	11.1	59.5	2.7	2.0	32.5	62.9	4.6	0.0
College (middle level)	11.7	3.6	6.0	13.8	64.1	0.5	0.4	31.6	65.0	1.8	1.6
University	7.2	2.1	4.3	14.7	71.7	0.0	0.0	31.9	52.3	9.1	6.7
Other	1.3	0.0	0.0	27.0	69.0	2.7	0.0	57.2	28.5	14.3	0.0
Don't know	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	14.7	3.4	5.8	11.4	61.4	2.6	0.7	35.0	60.3	4.4	0.3

Source: KNSPWD

3.6 Environmental Factors

Environmental factors such as temperature, terrain, accessibility of transport, climate, noise, etc., can improve or hinder a person's participation in such activities as working, going to school, taking care of one's home, and being involved with family and friends in social, recreational and civic activities in the community. PWDs were asked how often various environmental factors were a barrier to their own participation in activities that matter to them.



Table 9 summarizes the effect of environmental factors on PWDs by background characteristics. The results show that nearly one in five PWDs (18%) is affected on a daily basis by environmental factors and 4.5% are affected on a weekly basis. Sixty-five per cent of PWDs indicated that the environment has been a major problem in their daily lives. The survey shows that PWDs residing in rural areas were more likely to be affected by the natural environment on daily basis than their urban counterparts (20% versus 16%, respectively). A large percentage of those affected were in Western (29%), compared with only 9% in Central Province. PWDs aged 55+ were the most likely to be affected by the environmental factors.



Table 9: Effect of environmental factors on PWDs by background characteristics

	How often has natural environment made it difficult in last							Has it been a major problem			
	Daily	Weekly	Monthly	More than monthly	Never	N/A	Not specified	Little problem	Big problem	N/A	Missing
Residence											
Rural	20.3	4.5	7.1	15.7	50.1	1.8	0.5	28.8	68.4	2.4	0.4
Urban	16.4	6.7	5.9	11.8	55.9	2.2	1.2	31.5	64.5	2.8	1.3
Province											
Nairobi	16.9	5.6	7.7	9.5	57.9	2.4	0.0	26.0	68.2	2.7	3.1
Central	9.3	8.4	9.3	19.9	52.9	0.2	0.0	30.4	69.1	0.0	0.5
Coast	18.4	1.1	3.7	10.0	63.6	2.2	1.0	37.5	60.6	1.2	0.8
Eastern	25.2	2.3	5.3	18.2	46.8	1.5	0.8	25.1	71.7	3.2	0.0
North Eastern	12.6	2.2	5.0	10.7	66.6	0.9	2.1	18.1	81.9	0.0	0.0
Nyanza	20.9	7.1	9.6	11.2	48.6	1.6	0.9	23.6	71.2	5.3	0.0
Rift Valley	18.4	6.4	6.4	20.1	45.0	3.0	0.8	36.0	62.3	1.7	0.0
Western	28.6	0.8	3.3	11.4	52.4	3.5	0.0	35.7	62.2	0.0	2.1
Age group											
0–14	17.4	3.5	6.5	12.7	54.7	4.5	0.8	28.8	67.2	3.5	0.4
15–24	17.3	4.6	8.7	11.9	55.6	0.7	1.0	31.6	64.6	2.5	1.3
25–34	16.5	3.4	6.7	14.8	57.9	0.7	0.0	27.0	68.1	4.9	0.0
35–54	19.0	5.1	4.8	16.6	52.8	1.7	0.1	31.7	65.7	2.1	0.5
55+	22.3	6.8	7.2	16.7	45.8	0.7	0.5	28.1	69.8	1.5	0.6
Don't know	28.6	6.9	10.0	17.8	32.1	2.3	2.3	27.2	71.8	1.0	0.0
Sex											
Male	17.1	4.3	6.0	15.5	53.9	2.5	0.5	30.7	64.4	4.2	0.6
Female	21.7	5.6	7.7	14.4	48.8	1.3	0.7	28.1	70.4	1.0	0.4
Marital status											
Single	16.5	3.5	7.2	13.7	55.4	2.7	0.9	29.7	66.8	3.2	0.2
Married	21.2	5.9	5.9	14.9	50.5	1.1	0.4	31.0	65.9	2.4	0.8
Divorced/ separated	15.0	5.1	3.8	20.9	53.4	1.8	0.0	18.4	75.8	5.7	0.0
Widowed	25.9	6.8	8.4	17.8	39.0	1.4	0.7	26.8	72.0	0.4	0.8
Others	3.9	7.8	21.6	5.5	53.4	7.8	0.0	14.1	85.9	0.0	0.0
Highest level education attended											
Nursery, kindergarten	12.5	1.6	11.8	12.2	55.8	5.3	0.9	30.7	61.6	7.7	0.0
Primary	18.8	4.6	6.5	15.1	53.3	0.9	0.8	29.9	67.1	2.5	0.5
Post primary, vocational	8.2	0.0	10.2	20.0	61.6	0.0	0.0	30.5	58.5	11.0	0.0
Secondary, "A" level	19.5	5.4	8.9	10.9	53.5	1.7	0.2	32.9	62.9	2.9	1.4
College (middle level)	10.2	4.5	2.1	19.8	61.8	1.6	0.0	37.9	60.5	1.7	0.0
University	4.5	2.1	4.3	14.5	74.7	0.0	0.0	67.8	14.7	10.1	7.4
Other	2.4	4.9	13.6	25.2	53.9	0.0	0.0	47.0	43.7	9.3	0.0
Don't know	16.1	0.0	0.0	0.0	83.9	0.0	0.0	0.0	100.0	0.0	0.0
Total	17.6	4.5	7.0	14.6	54.5	1.2	0.6	31.6	64.8	3.0	0.7

Source: 2007 KNSPWD.

Table 10: Activities undertaken by respondents in the last seven days by background characteristics

	Worked for pay	Worked on own family business	Did not work but was employed	Did not work	No, never been employed	Homemaker	Other
Residence							
Rural	8.8	32.1	1.7	33.7	6.9	12.6	4.1
Urban	25.4	21.3	4.8	21.8	6.9	13.7	6.1
Province							
Nairobi	31.5	13.9	5.8	22.4	5.5	11.1	9.8
Central	12.6	38.1	1.6	33.6	1.9	11.4	0.8
Coast	14.5	21.1	6.2	25.6	9.3	19.2	4.1
Eastern	9.0	34.2	2.6	24.1	7.0	15.6	7.4
North Eastern	2.7	2.5	0	79.9	9.9	4.5	0.5
Nyanza	9.6	42.2	1.5	27.9	8.8	7.6	2.4
Rift Valley	11.0	23.2	.7	38.0	8.9	14.1	4.1
Western	6.3	21.7	1.4	39.8	4.7	18.4	7.6
Age group							
0–14	0	0	0	40.4	29.5	30.2	0
15–24	8.2	13.6	0.9	32.4	19.2	8.6	17.2
25–34	21.0	31.3	1.6	23.3	7.5	13.4	1.9
35–54	22.0	35.9	2.4	21.5	2.5	14.5	1.3
55+	4.4	37.2	3.9	33.6	4.0	15.6	1.4
Don't know	1.7	21.7	2.0	65.3	1.5	6.7	1.0
Sex							
Male	17.7	31.4	4.4	31.0	8.0	2.7	4.9
Female	7.5	28.5	0.6	31.5	6.0	21.8	4.2
Marital status							
Single	12.7	14.5	1.7	34.7	16.9	6.7	12.8
Married/Living together	14.9	39.0	3.2	24.7	2.8	14.6	0.8
Divorced/separated	12.9	24.4	0.9	38.4	5.9	12.8	4.7
Widowed	3.9	30.9	1.4	42.5	2.0	18.2	1.1
Don't know	32.1	27.0	5.6	25.4	9.9	0	0
Highest level education attended							
Nursery, kindergarten	14.6	37.3	0	25.7	14.1	8.3	0
Primary	10.4	37.4	1.6	27.0	5.9	12.4	5.4
Post primary, vocational	20.2	43.4	3.4	12.0	13.9	7.1	0
Secondary, "A" level	22.3	27.4	5.7	18.6	10.7	8.0	7.3
College (middle level)	36.4	24.7	6.7	19.5	4.3	4.1	4.3
University	45.4	23.2	5.3	11.7	6.2	3.6	4.6
Other	8.9	0	0	56.2	18.5	5.1	11.3
Don't know	0	23.6	0	76.4	0	0	0
Total	16.3	33.3	3.1	24.2	7.2	10.3	5.7

Source: 2007 KNSPWD.

3.7 Employment, Income and Social Security

The employed/working persons in this survey comprised those PWDs aged 15 years and above who reported having either held a job or undertaken an activity for pay, profit or family gain during the week prior to the survey. As Table 10 illustrates, a third of the PWDs work on own family business and about a quarter do not work. About 16% work for pay and one out of ten indicated that they were homemakers.

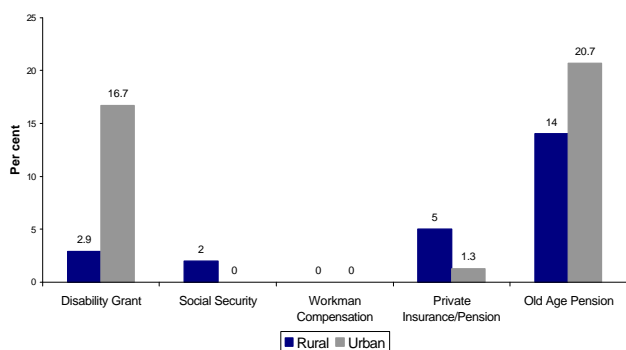
The analysis shows that PWDs who reside in urban areas are more likely to be employed than

their rural counterparts. A quarter of them worked for pay compared with only 9% of those in rural areas. Similarly, a third of those in rural areas did not work, compared with only 22% of those in urban areas. But a third (32%) of those who worked on own family business were residing in rural areas versus one fifth in urban.

The largest proportion of PWDs who worked for pay were in Nairobi (32%) and the smallest in North Eastern province (3%). Those working were more likely to be males (18%) than females (8%). They were also likely to be better educated: those with university education were 45%, middle level education (36%), secondary or "A" level (22%) or post primary vocational education.

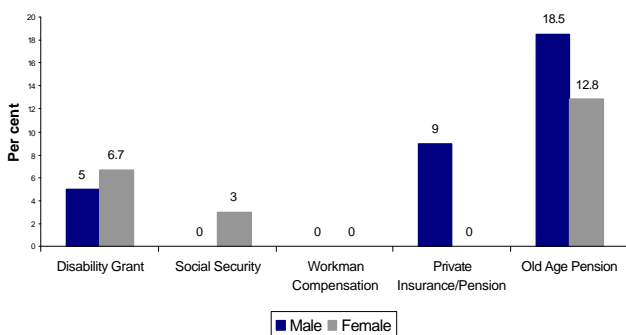
Most PWDs are unlikely to have active or viable socio-economic engagements to earn a living. Consequently, they require some assistance in the form of social security grants for the

Figure 3: Distribution of PWDs by residence and type of grant received



Source: 2007 KNPSWD.

Figure 4: Distribution of PWDs by sex and type of grant received



Source: 2007 KNPSWD.

Table 11: Type of grant currently received by background characteristics

	Currently receiving any form of social security/disability grant or any financial support		Disability grant	Social security	Workman's compensation	Private insurance/pension	Old age pension
	%	No					
Residence							
Rural	1.7	1,891	2.9	2.0	0.0	5.0	14.0
Urban	1.8	500	16.7	0.0	0.0	1.3	20.7
Province							
Nairobi	2.0	226	32.8	0.0	0.0	2.6	16.6
Central	2.5	370	10.0	7.0	0.0	0.0	14.1
Coast	1.1	222	0.0	0.0	0.0	0.0	32.7
Eastern	0.9	398	0.0	0.0	0.0	0.0	0.0
N Eastern	0.0	52	-	-	-	-	-
Nyanza	3.0	525	0.0	0.0	0.0	0.0	10.5
Rift Valley	1.1	416	0.0	0.0	0.0	35.2	38.7
Western	0.4	183	0.0	0.0	0.0	0.0	0.0
Sex							
Male	1.7	1,120	5.0	0.0	0.0	9.0	18.5
Female	1.7	1,271	6.7	3.0	0.0	0.0	12.8
Total	1.6	1,697	8.8	0.0	0.0	6.3	17.6

Source: 2007 KNPSWD.

destitute, disability grants or other forms of financial support. The survey collected data on various social support/grants that PWDs may be getting from various institutions. Figures 3 and 4 and Table 11 show the distribution of persons with disability who received grants by type of grant received and background characteristics. Among others, PWDs received old age pensions (18%) and disability grants (9%). The urban PWDs were more likely to access disability grants (17%) than their rural counterparts (3%). This scenario was repeated in respect to old age pensions, where about 14% and 21% of rural and urban residents got them, respectively. Interestingly, none received workman's compensation.

Many PWDs who received disability grants were from Nairobi (33%), while those in Western and Eastern mainly received other forms of grant. Similarly, many of those who received old age pension were from Rift Valley.

3.8 Health and General Wellbeing

Health, according to the WHO's widely accepted definition, is the complete state of physical, mental and social wellbeing and not merely the absence of disease and deformity. Policies, programmes and practices in the health sector have an impact on the rights of PWDs, and yet most development initiatives ignore the needs of PWDs. The UN Convention on the Rights of PWDs emphasizes the importance of mainstreaming disability issues for sustainable development. Attention to health and its social determinants is essential to promote and protect the health of PWDs for greater fulfilment of human rights.

Table 12 shows the percentage of PWDs who are aware of, have ever needed and have received health services by background characteristics. Overall, nine in ten of the PWDs are aware of the health care services available. More PWDs in urban (95%) were likely to be aware of

The UN Convention on the Rights of PWDs emphasizes the importance of mainstreaming disability issues for sustainable development. Attention to health and its social determinants is essential to promote and protect the health of PWDs for greater fulfilment of human rights.

Table 12: Percentage of PWDs who are aware of and have ever needed or received health services by background characteristics

	Aware of health services	Needed health services	Received health services	All number
Residence				
Rural	85.6	79.4	57.0	2,447
Urban	95.2	71.6	56.8	648
Province				
Nairobi	96.5	73.9	62.2	279
Central	86.7	75.5	64.3	427
Coast	89.6	70.8	57.7	304
Eastern	89.1	85.2	63.0	523
North Eastern	85.5	84.9	54.7	66
Nyanza	92.9	86.0	60.1	674
Rift Valley	89.6	79.3	56.6	554
Western	58.1	53.5	20.2	268
Age group				
0–14	80.9	77.0	52.4	699
15–24	89.5	79.6	61.4	473
25–34	91.8	81.1	57.6	356
35–54	91.6	76.7	58.6	678
55+	88.6	77.1	57.2	676
Don't know	82.6	76.5	54.3	213
Sex				
Male	87.4	78.9	58.4	1,501
Female	87.9	76.7	55.5	1,594
Marital status				
Single	84.3	76.6	55.7	1,390
Married	91.9	79.6	58.9	1,177
Divorced/separated				
Divorced/separated	90.0	79.2	59.7	92
Widowed	86.2	76.2	54.8	420
Others	89.3	75.9	61.7	16
Highest level education attended				
Nursery, kindergarten				
Nursery, kindergarten	87.8	82.7	51.0	98
Primary	88.2	80.5	58.0	1,461
Post primary, vocational				
Post primary, vocational	94.8	84.0	63.2	21
Secondary, "A" level				
Secondary, "A" level	92.6	74.8	61.8	407
College (middle level)				
College (middle level)	97.1	65.3	53.9	142
University	91.3	49.3	53.6	41
Other	87.7	82.2	71.3	21
Don't know	100.0	49.2	49.2	4
Total	89.7	77.9	58.2	2,195

Source: 2007 KNSPWD.

health services than their rural counterparts (86%). However, PWDs residing in the urban areas are less likely to have needed health services (72%) compared with their rural counterparts (79%).

PWDs residing in Central and Eastern provinces are more likely to receive health services (64% and 63%, respectively) than those in other provinces. In Western Province, PWDs are least likely to get health services (20%).

3.9 Use of Reproductive Health Services

Like general health, reproductive health is a state of complete physical, mental and social wellbeing, and not absence of disease or infirmity in all matters relating to the reproductive health system, its functions and processes. The main components of reproductive health services in Kenya include:

- w Safe motherhood and child survival
- w Family planning
- w Management of STIs/HIV/AIDS
- w Promotion of adolescent health
- w Management of infertility
- w Gender issues and reproductive rights

The survey focused on the use of contraceptive by PWDs as well as information on children ever born and child survival.

Table 13 and Figure 5 provide information on the distribution of women with disabilities aged 12–49 who currently use any form of family planning by background characteristics. Overall use of family planning among these women was found to be 16%. Out of this proportion, 14% use pills, 28% use injectables and 19% use surgical



Table 13: Percentage distribution of women with disabilities age 12–49 who are currently using family planning by method and background characteristics

	Any type of family planning %	No	Pill	Loop/ Norplant	Injection	Diaphragm foam/ jelly	Female sterilization	Male sterilization	Periodic abstinence	Withdrawal	Condom	Female condom	Traditional methods	Other methods	Don't know method	All No.
Age group																
0-14	0.0	11	-	-	-	-	-	-	-	-	-	-	-	-	-	0
15-24	10.0	80	29.2	0.0	16.5	0.0	12.4	0.0	10.1	0.0	31.7	0.0	0.0	0.0	0.0	8
25-34	17.5	73	12.0	10.3	49.0	0.0	7.2	0.0	10.4	0.0	11.0	0.0	0.0	0.0	0.0	13
35-54	19.3	132	11.0	8.0	20.9	0.0	26.2	0.0	6.8	0.0	11.6	0.0	8.9	3.9	0.0	26
Residence																
Rural	17.9	203	17.9	4.3	28.8	0.0	23.7	0.0	10.7	0.0	3.8	0.0	6.3	2.8	0.0	36
Urban	10.8	93	2.1	18.1	24.7	0.0	0.0	0.0	0.0	0.0	55.1	0.0	0.0	0.0	0.0	10
Highest level education attended																
Nursery,																
kindergarten	5.5	2	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Primary	20.2	150	19.7	1.9	29.6	0.0	20.4	0.0	7.6	0.0	11.1	0.0	7.5	0.0	0.0	30
Post primary,																
vocational	15.3	10	0.0	0.0	0.0	0.0	0.0	0.0	53.6	0.0	46.4	0.0	0.0	0.0	0.0	2
Secondary,																
"A" level	10.5	69	2.8	24.9	41.1	0.0	21.7	0.0	0.0	0.0	9.5	0.0	0.0	0.0	0.0	7
College (middle level)																
University	15.1	24	13.8	27.2	0.0	0.0	0.0	0.0	0.0	0.0	59.0	0.0	0.0	0.0	0.0	4
University	0.0	4	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Marital status																
Single	13.5	115	15.2	8.6	11.5	0.0	29.3	0.0	5.3	0.0	30.3	0.0	0.0	0.0	0.0	15
Married	15.3	139	17.3	9.7	38.8	0.0	15.8	0.0	14.5	0.0	3.9	0.0	0.0	0.0	0.0	21
Divorced/																
separated	14.7	14	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	66.7	0.0	0.0	0.0	0.0	2
Widowed	27.1	28	8.9	0.0	29.3	0.0	9.8	0.0	0.0	0.0	0.0	0.0	29.9	13.2	0.0	8
Others	0.0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Total	15.6	296	14.4	7.3	27.9	0.0	18.6	0.0	8.4	0.0	14.9	0.0	4.9	2.2	0.0	46

Source: 2007 KNSPWD.

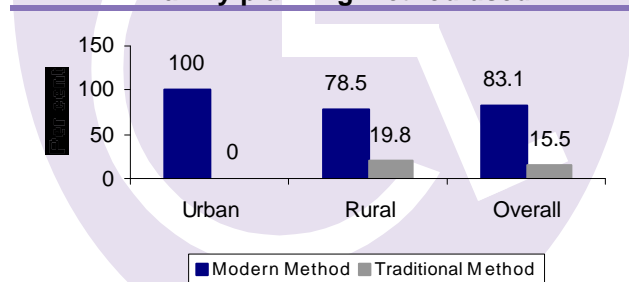
methods. The use of Norplant and condoms was highest among PWDs in urban areas, while female sterilization and periodic abstinence were more common among the rural respondents.

In the urban areas, all the women PWDs practising family planning use modern methods, while in rural areas the proportion is 79%. Overall, the proportion of women PWDs using modern family planning methods is 83%.

Slightly more than a quarter of disabled women aged 35–54 years and 12% of those aged 15 to 24 years have undergone female sterilization. About two out of every five married women with

disability and a third of those who are divorced or separated were likely to use injectables as a method of family planning. Two out of three of these divorced or separated women also use condoms; among single women the proportion is three out ten.

Figure 5: Proportion of women PWDs aged 12–49 years by residence and type of family planning method used



Source: 2007 KNSPWD.

3.10 Attitudes towards Persons With Disabilities

Problems of disability are largely manifested in social contexts and social relations, rather than in an individual's medical condition. People living and interacting with PWDs tend to treat them differently in relation to their disabilities. The survey sought to find out how often people's attitudes towards PWDs have been a problem to them and whether they view it as a major problem.

Table 14 and Figure 6 show that seven out of ten PWDs did not view people's attitudes towards them as a problem at home. Of those who did regard people's attitudes as a problem, 37% indicated that this was a little problem while 57% termed it a big problem. Ten per cent of rural

Table 14: Attitudes towards PWDs by background characteristics (by percentage)

	How often other people's attitudes have been a problem at home						Has it been a major problem				
	Daily	Weekly	Monthly	More than monthly	Never	N/A	Not specified	Little problem	Big problem	N/A	Missing
Residence											
Rural	10.1	2.3	3.1	10.1	69.8	3.0	1.5	35.0	60.6	4.2	0.1
Urban	6.7	3.9	4.5	7.8	71.6	4.3	1.2	31.3	58.6	10.1	0.0
Province											
Nairobi	5.0	2.4	4.3	3.0	76.0	7.9	1.4	40.2	50.9	8.9	0.0
Central	2.5	3.3	2.1	3.3	88.2	0.6	0.0	45.7	54.3	0.0	0.0
Coast	8.9	2.6	1.1	6.7	73.1	5.4	2.2	37.1	61.0	1.9	0.0
Eastern	8.8	1.0	2.4	9.9	76.8	0.7	0.4	23.9	65.2	10.9	0.0
North Eastern	8.0	0.0	0.0	0.8	88.6	0.5	2.1	26.3	73.7	0.0	0.0
Nyanza	15.8	3.5	6.3	16.8	50.6	4.0	3.0	34.5	61.4	4.1	0.0
Rift Valley	5.6	3.5	4.2	10.9	70.4	3.8	1.6	31.2	60.0	8.8	0.0
Western	18.6	1.8	1.1	10.6	63.7	3.4	0.8	43.6	55.4	0.0	1.0
Age group											
0-14	10.6	1.7	2.7	11.3	65.9	6.6	1.3	37.3	59.4	3.2	0.0
15-24	10.9	4.0	3.8	10.6	66.7	2.0	1.8	35.3	58.4	6.4	0.0
25-34	8.3	3.4	4.4	13.3	65.9	2.9	1.9	33.6	58.0	7.7	0.7
35-54	9.1	2.4	4.4	8.8	71.6	2.3	1.4	35.4	61.2	3.3	0.0
55+	7.4	2.8	2.6	6.5	77.0	2.4	1.3	34.1	58.1	7.8	0.0
Don't know	10.8	1.6	3.1	7.9	73.1	2.1	1.5	19.1	74.6	6.3	0.0
Sex											
Male	9.7	2.6	4.1	10.2	68.3	3.5	1.6	31.5	62.3	6.2	0.0
Female	9.1	2.7	2.8	9.0	71.9	3.1	1.4	37.3	57.9	4.6	0.2
Single	11.0	2.2	3.1	10.9	66.2	4.6	1.9	33.5	61.0	5.2	0.2
Married	6.7	3.5	3.6	8.6	74.5	2.0	1.1	36.8	56.5	6.7	0.0
Divorced/separated	10.3	2.3	1.9	10.1	71.5	0.5	3.4	34.2	58.1	7.8	0.0
Widowed	11.2	1.6	3.9	7.8	71.5	3.0	0.9	31.9	65.6	2.5	0.0
Others	7.8	0.0	11.7	12.2	56.5	11.8	0.0	4.9	95.1	0.0	0.0
Highest level education attended											
Nursery, kindergarten	12.3	0.8	1.3	11.7	65.1	5.1	3.7	43.8	53.7	2.5	0.0
Primary	10.5	3.3	2.8	11.6	68.4	2.1	1.3	35.0	59.8	5.2	0.0
Post primary, vocational	5.2	0.0	5.0	1.9	86.7	1.2	0.0	44.1	8.3	47.7	0.0
Secondary, "A" level	5.5	1.9	5.7	7.8	73.4	3.2	2.4	45.6	47.7	6.6	0.0
College (middle level)	1.8	6.4	7.1	5.5	75.9	1.7	1.7	30.0	61.4	6.0	2.6
University	1.4	0.0	0.0	6.3	92.3	0.0	0.0	59.9	13.2	26.9	0.0
Other	28.9	0.0	8.8	18.0	41.4	0.0	2.9	31.9	60.3	7.8	0.0
Don't know	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	9.0	3.0	3.6	10.4	70.1	2.4	1.6	36.9	57.0	5.9	0.1

Source: 2007 KNSPWD.

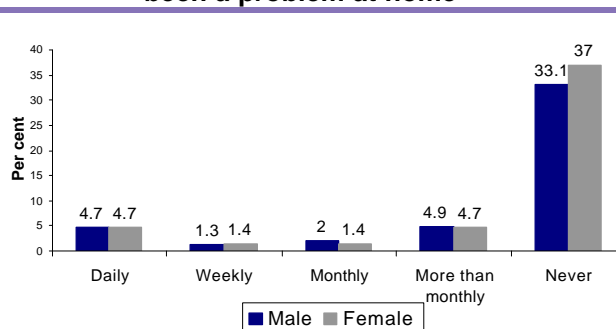
respondents reported that people's attitude towards them has always been a problem at home compared to 7% in the urban areas.

Nyanza and Western provinces had the highest percentage of PWDs who mentioned people's attitude towards them at home as a problem on daily basis (16% and 19% respectively). Central had the lowest perception (3%). More males (32%) than females (28%) found people's attitude towards them at home a big problem.

Education seems to have a positive influence on the outlook of PWDs in relation to peoples' attitudes towards them as evidenced by the survey results. The highest proportion of those who viewed it as a daily problem had pre-primary level of

education (12%), while the lowest proportion was found among those with university education.

Figure 6: Distribution of PWDs by sex and how often people's attitudes have been a problem at home



Source: 2007 KNSPWD.

4. The Next Steps

It is important to stress that this document is a preliminary report of the results of the 2007 KNSPWD. Thus it has presented only selected key highlights of the survey. These included the prevalence of disability by type, situation of disabled persons, effects of immediate surroundings on PWDs, employment and income, and the use of assistive devices and support services. Other aspects summarized here were the use of reproductive health services and attitudes towards disabled persons. It is hoped that readers of this preliminary document will be able to make good use of the information as they await the main report on the survey.

The main report of the 2007 KNSPWD is expected to be available to the public by August 2008. In addition to the information in this preliminary report, the main report will present a broader picture of the status of PWDs in Kenya, including:

- Educational attainment
- Reasons for leaving school
- Causes of disabilities
- Participation restrictions
- Availability of assistive devices and support services
- Knowledge and use of existing services

These findings will be presented by background characteristics and other factors. Besides these, the main report will discuss institutional and community perspectives and will draw programme and policy recommendations from the findings.

The main report will thus address the existing data gaps with respect to the number of PWDs,

The intention of this report is to provide the basis for improving planning for PWDs in terms of education, training, infrastructure, rehabilitation, assistive devices and environmental factors. In this way PWDs will be assisted and enabled to participate effectively and with dignity as full members of society.

types of disabilities and their main causes, and the problems and needs of PWDs. The intention is to provide a solid basis for improving the planning for PWDs in terms of education/training, infrastructure, rehabilitation, assistive devices and environmental factors that may hinder their involvement in social and development activities. In this way PWDs will be assisted and enabled to participate effectively and with dignity as full members of society.



Definitions used in the 2007 KNSPWD are those used internationally in the disability circle, modified to suit the Kenyan context.



Disability symbol – Internationally recognized sign used to mark a vehicle for a person with disability, reserved parking spaces, access to buildings and other facilities, and other conveniences for disabled persons.

Activities of daily living (ADL) – Such activities as personal care, care of the home, childcare, work, schooling, recreation, participation in community activities and others that are aspects of everyday life.

Activity limitation – The extent of an individual's ability to carry out a certain prescribed or intended task or activity without the use of any assistive devices – either technical or personal.

Assistive devices (and technology) – Appropriate appliances or equipment designed to enable individuals with disability to participate in activities of daily living with minimum difficulty. According to the disability such aids improve mobility, hearing and vision and enhance communication. Among them are wheelchairs, crutches and other walking aids, prostheses, hearing aids, visual aids, and specialized computer software and hardware.

Disability – A physical, mental, emotional or other health condition/limitation that has lasted or is expected to last six or more months and that limits or prevents a person's participation in the activities of daily life.

Environmental factors – Elements of a person's surroundings that affect the person's participation in activities such as working, going to school, taking care of their home, and being involved with family and friends in social, recreational and civic activities in the community. Some environmental factors can improve participation, while others act as barriers and limit participation.

Hearing impairment – Refers to deafness, hearing loss or difficulty in hearing, including the inability to hear what is said in a conversation even with hearing aids.

Mental disability – Refers to a variety of disorders that affect the acquisition, retention, understanding, organization or use of verbal and/or non-verbal information. This can manifest itself through delays in cognitive, physical, communication, social, emotional and adaptive development.

Other disabilities – Refers to any other form of handicap that is not mentioned among the main disability domains.

Participation restrictions – Difficulties an individual experiences in performing a particular task/activity within their current environment. (Current environment refers to the surroundings in

which a person lives, works and plays most of the time.)

Physical disability – Refers to any difficulty in moving one or more parts of the body.

Self-care difficulties (disabilities) – Problems in carrying out activities of daily living without support from a relative, personal assistant or caregiver. Self-care activities include personal hygiene (washing/bathing, toileting, care of teeth, hair and nails, etc.), dressing and undressing, and eating and drinking.

Speech impairment – Refers to any difficulty in communicating through oral speech or being understood by others.

Support services – All services that are given or rendered to PWDs such as a personal aide, personal assistant or caregiver, sign language interpreter, disability grant, social support, etc.

Visual impairment – Refers to blindness or difficulty seeing even with spectacles.





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