**Mwaijande Thadei Violet**

_____

# Access to education and Assistive devices for children with physical disabilities in Tanzania

**Oslo and Akershus University College of Applied Sciences,**

**Faculty of Social Sciences**

**Abstract**

Since 1990 many countries in Sub-Saharan Africa have witnessed extraordinary progress in school enrollment and establishment of comprehensive rehabilitation programs for provision of assistive devices for children with physical disabilities, however, the progress has slowed in recent years. UNESCO warns that unless new measures are taken, the number of out-of-school children in 2015 will increase from current levels. Inequalities in most developing countries have been found to be a major barrier to universal education and provision of assistive devices. However, to achieve universal education and health we must focus on all marginalized groups. People with disabilities are among the least visible of the marginalized children. As the Tanzania government implemented a policy on people with disabilities in 2004, it is essential to understand the achievement on accessing education and assistive devices for children with physical disability since the implementation of this policy. Therefore, using the available data this study examined schooling patterns and the accessibility of assistive devices for children with physical disabilities in Tanzania. The study finds that children with disabilities are significantly less likely to enroll, attend and complete Grade 5. It also finds out that disability is experienced differently depending on the nature of the disability. Physical disabilities carry high stigma and require extra resources. Consequently, children with disabilities are less likely to be given equal opportunities as non-disabled are. Also the study finds out that: even though producers of goods and services are increasingly introducing accessibility as a criterion, the practice is still rare in Tanzania.

Oslo and Akershus University College

Oslo 2014

# Contents

## Acknowledgements

Completing this thesis would not have been possible without the support of many people. I am deeply indebted to my supervisor, Madam Bennedichte C. R. Olsen  for her patience and invaluable guidance throughout the whole thesis work. My gratitude also goes to Prof. Arne. H. Eide from SINTEF Norway. Also my sincere thanks goes to Mr. H.G. Shangali Dean Faculty of Rehabilitation Medicine at Kilimanjaro Christian Medical University and Principal of Tanzania Training Center for Orthopaedic Technologists (TATCOT for providing advice and inspiration for this thesis.

Further appreciation goes to friends and colleagues in the MIS class of autumn 2014.

I would like to express my special thanks to my wonderful family for the many sacrifices that you made to make this thesis possible.

Finally, I am truly grateful to the Almighty God for being blessed with this opportunity

**Mwaijande T. Violet**

**List of abbreviations**

ARI            -African Rehabilitation Institute

CBR            -Community Based Rehabilitation

CRPD           -Convention on the Rights of Person with Disabilities

EFA            -Education for All

ICF            -International Classification of Functioning, disability and health

ICRC           -International Committee of the Red Cross

MOEVT          -Ministry Of and Education Vacation Training

MDGs           -Millennium Development Goals

MKUKUTA   -Mpango wa Kukuza na Kuondoa Umaskini Tanzani

NPD            -National Policy on Disability

PEDP           -Primary Education Development Plan

UN             -United Nation

UNICEF         -United Nation Children's Fund

UNESCO         -United Nations Educational, Scientific and Cultural Organization

URT            -United Republic of Tanzania

WPA            -World Program of Action

WHO            -World Health Organization


**Key words**: Physical disability, education and assistive devices

# CHAPTER 1: Introduction

This study is focusing on the achievements in the access to education and assistive devices for children with physical disabilities in Tanzania after the implementation of National Policy on Disability, issued in 2004. Before that, the Tanzanian government had no policy to guide service delivery to children with physical disabilities. Although the Government had no clear policy over the years, Tanzania has been actively involved in both international and local initiatives that address disability issues. For example:

At the international level, Tanzania is a signatory to various disability specific United Nations instruments which include the declaration on the Rights of People with Disabilities (1975), Convention on the Rights of the Child (1989) and the Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1993). At the continental level Tanzania is a signatory to the Plan of Action for the African decade of Persons with Disabilities and a member of African Rehabilitation Institute (ARI).

Locally, Tanzania has taken measures to address the problem of disability from various angles including the national health initiatives to eradicate childhood diseases that cause disablement such as polio, enactment of disability legislations and free education to all, a strategic plan which ensure that all children with or without disability should attend primary education. With a critical eye this study will examine the development within the field of education and assistive devices for children with physical disabilities since 2004.

## 1.1. Purpose and objectives of the study

Education and assistive devices are important means to empower children with physical disabilities. If offered accordingly it turns individuals from being dependents to independents by developing their consciousness, competence, independent life and confidence thus enabling the development of the respective individual (Mhehe, (2008). It is out of this understanding that Tanzania has been striving to expand social services (education opportunities and to ensure access to assistive devices) to its citizens. However, in this initiative to expand education opportunities, and other social services to all citizens, there has always remained the danger of marginalizing further the already marginalized groups. Thanks to the government's realization of

this danger to the group of children with physical disabilities that it passed the policy to specifically address their questions.

It is therefore worth researching on the topic so as to spot the extent to which the country's initiative to educate all citizens and provide free/cost effective assistive devices under equal basis are brought into reality. The field of physical disabilities is yet to entrench itself successfully in Tanzania and it faces a lot of challenges like lack of specialists including Orthopaedic Engineers, Othopaedic Technologists, equipments and learning materials, limited education opportunities for children with physical disabilities and prejudice of the society to list just few (National Policy on Disability 2004, Tanzania Human Rights Report 2010, 2011). Being the case there is an urgent need to study more on the topic and ensure a watchful eye on every unfolding opportunity towards success in provision of accessible education and assistive devices for children with physical disabilities.

## 1.2. Objectives of the study

The broad objective of this thesis is to explore the opportunities and challenges concerning the accessibility to education and assistive devices for children with physical disabilities in Tanzanian. More specifically, the research sought to address three specific objectives, namely to:

- Assess the extent to which children with physical disabilities have achieved in accessing education opportunities and assistive devices since the implementation of Tanzania National Policy on Disability

- Identify barriers to, and facilitators for, the access to education and assistive devices for children with physical disabilities.

- Provide policy implications.

## 1.3. Research questions

Inequalities in most developing countries have been found to be a major barrier to universal education and provision of assistive devices for children with physical disabilities. Lack of active policies and political will have left the marginalized group more deprived. This brings me to my

first research question which says: *To what extent have children with physical disabilities achieved access to education opportunities and assistive devices after the implementation of Tanzania National Policy on Disability?*

Before i present my second research question, i would like to intrdouce you to Amani a 12-year-old from Arusha-Tanzania. The boy developed a mobility difficulty and was forced to leave school, his parents, Azizul and Amina, tried their best to treat him but nothing worked. The Monduli Rehabilitation Centre for Children with Disabilities took a comprehensive approach to the situation, involving both the family and the school. First, the project developed a rehabilitation plan for Amani, providing him with regular therapy at home to improve his mobility. At the same time, the project staff convinced the school authorities to allow him to join a regular class. This takes me to my second research question which says that: *What are the facilitators for and barriers to the access to education and assistive devices for children with physical disabilities in Tanzania?*

## 1.4.    Organization of the study

This study is organized into six chapters,. Chapter one as we have seen it above, Chapter two presents the methodology of the study and definition of key concepts of the study and also it present the theoretical underpinnings upon which the study is based on. In chapter three I present policy and practice for people with disabilities in Tanzania. Chapter four presents the scope on accessing education and assistive devices in Tanzania are presented together with attitude toward disability in Tanzania. Chapter five present the barriers faced by children with physical disabilities in accessing education and assistive devices and the findings, and chapter six present the discussion, conclusion and recommendations of this study.

# CHAPTER 2: Methodology

The key concepts in this thesis are physical disability, education and assistant devices.

## 2.1.        Education

Education is a form of learning in which the knowledge, skills, and habits of a group of people are transferred from one generation to the next through teaching, training, or research. Education commonly takes place under the supervision of others, but may also be self-education. Any experience that has an influential effect on the way one thinks, feels, or acts may be considered educational. (WHO 2011)

## 2.2.        Assistive device

Refer to a device that has been designed, made or adapted to assist a person to perform a particular task. People with disabilities benefits from the use of one or more assistive devices. Some common types of assistive devices are mobility devices (eg. Prosthesis, orthosis, wheelchair, walking), visual devices (eg. glass), and hearing devices. To ensure that assistive devices are used effectively, important aspects of their provision include user education, repair, replacement and environmental adaptation in the home and community (Eide 2011)

## 2.3.        Physical disability

Physical disability is associated with mobility and movement limitation, the inability to use limbs and trunk effectively because of paralysis, stiffness, pain, etc. Other physical disabilities include impairments which limit other facets of daily living, such as respiratory disorders and epilepsy. Individuals with physical disabilities often experience stigma concerning their physical competence and bodily appearance. This leads to impairment in social interactions and devaluation of an individual (WHO 2012)

## 2.4.    Social disability model

The social model is based on a notably distinct paradigm. It does not absolutely reject the idea of health limitation, which is considered as the impairment, but considers a person to be "differently abled". This view, put forward by the disabled peoples' movement, tends to look at the barriers

that exist within the social context and prevent a person from achieving the same level of functioning than a non-disabled person. In this perspective, it is society that needs adaptations in order to include persons with disabilities (Oliver 1996). The advocates of the social model consider that physical limitations become a disability because society does not accommodate the differences in human functioning. Mainstreaming disability concerns is a progressive and sustainable way of redesigning society in order to include all disabled people. However, the social model has implications with regards to the issue of measuring prevalence, doing research and defining policies. Questions based on this model will not focus only on impairment but will include the identification of barriers within the social environment that create the disabling situation. In this perspective, policy makers have to address restrictions caused by social organization, promote adaptation by law and further participation by mainstreaming disability concerns and ensure equal rights and opportunities.

## 2.5.    Disability as human rights issue versus as a poverty issue:

Disability is increasingly recognized as a human rights issue. The gradual shift in understanding and perception, towards a human rights based approach, builds upon the emergence of the social model of disability. The social model locates discrimination in society creating the barriers to inclusion and equal rights rather than seeing an individual as the problem - and in need of medical treatment or charity. People with disabilities and Disabled People's Organizations have been the primary advocates for this change. Together they have developed powerful lobby groups calling for specific legal instruments to protect disabled people's fundamental human rights.

Poverty and disability are linked in a vicious cycle. It is a two-way relationship - disability adds to the risk of poverty, and conditions of poverty increase the risk of disability. People with disabilities are more prone to live in chronic poverty, which in turn can lead to disabling conditions. Disability in developing countries stems largely from preventable impairments associated with communicable, maternal and perinatal disease and injuries, and prevention has to remain a primary focus. Disability movements call for a break in this link through the inclusion of disability issues in international development work (Elwan 1999)

There is little doubt that in Tanzania poverty and the poor functioning of preventative health care and pre and ante natal healthcare exacerbates disability. Similarly services for children with physical disabilities are compromised because of the poverty of many families and the failure to invest in these services. So for example, at Monduli rehabilitation center for children with physical disabilities, children are kept at the center and away from home for up to a year whilst they receive treatment because the hospital loses patients if they send them home between treatments because they cannot afford to pay the transport to return.

## 2.6. Data sources

Primary data--Literature review of published scientific research, journals articles and text books in regards to access to education and assistive devices, I will also look in Tanzania disability survey report and the World Report on Disability.

## 2.7. Literature search strategy

The initial search occurred between April and June 2013. A second search for more up to date studies was also conducted between July and December 2013. The literature search was guided by the study's research questions.

Relevant studies for the two research questions were identified through a search of electronic academic databases and official websites of relevant organizations for primary research studies. The databases searched included the following; EBSCO, Academic Search Premier, Social Sciences Citation Index and Google Scholar. The websites of relevant organizations such as the Tanzania Ministry of Health department of social welfare, Tanzania Ministry of Education and Culture, Tanzania Ministry of Youth and Employment and Tanzania Bureau of Statistics, were searched for research reports. Additionally, citation tracking of articles citing a particular study was possible with Google Scholar and Social Science Citation Index. Reference lists of main studies were also used to check for more relevant texts. The search was limited to English language studies.

The search terms used in the databases were applied to all the other searches to ensure homogeneity. The main search terms adopted were: Disability, physical disability, then children with physical disabilities, following by education and then assistive devices in Tanzania. The

initial search with these main search terms yielded so many articles. To broaden the search, related concepts and synonyms were used and these included; children with physical disabilities + education, children with physical disabilities + assistive devices, The search yielded considerable amount of hits included journal articles, discussion papers, commissioned research reports and academic theses.

The second stage of the process involved detailed examination of the contents. From these contents, two designs; the access to education and assistive devices were picked as appropriate designs to strengthen on children with physical disabilities. A second search for literature reporting on the two designs was conducted in the databases mentioned above. Citation tracking and identifying texts from reference lists of relevant studies was also done. The following search words were used; disabilities + physical disabilities + children + education + assistive devices. The process resulted in a number of texts being identified.

## 2.8. Selection criteria

The selection stage for studies on the access to education and assistive devices for children with physical disabilities involved a detailed examination of the retrieved articles. The studies were assessed for quality and relevance. Studies were included if they were based on primary empirical data, if they contributed to understanding the effects of the children with physical disabilities, findings and analysis were detailed enough to provide a sound basis for the conclusions reached.

## 2.9. Data extraction and synthesis

Data extraction involved summarizing and sorting into categories the key findings of each research paper based on the themes derived from the research questions of the study. The extracted data also included detail on the methodology of each research paper. For the studies on the children with physical disabilities, the findings of each research paper were noted whether they reflected on access to education and assistive for children with physical disabilities. The findings across the different categories in all the included studies were then combined and analyzed using narrative synthesis.

The narrative synthesis approach is a mechanism of synthesizing findings from multiple studies (both quantitative and qualitative) and relies primarily on the use of words and text to explain the findings of the review (Pope et al 2007). The process involves exploring relationships within and between reviewed studies. The approach includes interpretive analysis which involves exploring alternative interpretations of relationships across and between studies

## 2.10.   Internal and external validity

Internal validity generally relates to the extent to which the findings of a research 'accurately' represent the phenomenon under study. Randomized studies that involve random assignment of units to two groups are considered to lead to high internal validity (Chambliss and Schutt 2006, 139). Internal validity in both quantitative and qualitative research might also be enhanced by systematic, explicit and transparent processes for carrying out the research (Golafshani 2003). This study, to minimize selecting papers with low internal validity, attempted to include papers (both quantitative and qualitative) with detailed explanations of systematic and rigorous research designs.

External validity, on the other hand, relates to the extent to which findings from a study or set of studies can be generalized across contexts and time. Collingridge and Gantt (2008) espouse that studies that build on existing theoretical concepts, adopt sound research designs and clearly define how the findings apply to other contexts, might produce results that can to some extent be generalized across settings and time. The thesis did not, however, set out criteria for assessing the external validity of the studies under review.

## 2.11.   Ethical considerations

Due to fact that my thesis is based on secondary data, Ethical approval was not compulsory

## 2.12.   Limitations of the study

- Due to limited time the study focused only on Education and Assistive devices as among key ingredients to enable greater participation within the society

- The study was concentrate only on children with physical disabilities in Tanzania

- Limited disability documents from Tanzania.

# CHAPTER 3: Government Policy and Practice

In this chapter I would like to put forward the policy and practice in regards to people with disability in Tanzania, but before I start let me shortly in light the geography, population of the United Republic of Tanzania, the background and relevance of the thesis.

## 3.1.    Geography and Population

The United Republic of Tanzania consisting of Tanzania mainland and Tanzania Zanzibar is the largest country in East Africa. It covers 947,300 square kilometers of which approximately 6.4 percent is made up of Inland water. It lies south of the equator and shares borders with Kenya and Uganda to the north, Rwanda, Burundi, Democratic Republic of Congo and Zambia to the west, Mozambique and Malawi to the south. Tanzania has conducted five censuses since her independence in 1961. Through its censure it show the increase of the population size from the first censure results of 1967 with 12.3 million people and the resent censure results of 2012 with 45 million people.

## 3.2.    Background and relevance of the thesis

The UN convention recognizes that children with physical disabilities should have full enjoyment of all human rights and fundamental freedoms on an equal basis with other children, and calls attention to obligations undertaken by States Parties to the convention on the rights of the child. Education and assistive devices are among other rights for children with physical disabilities.

The daily reality for children with a physical disability is that, they are often condemned to a poor start in life and deprived of opportunities to participate in society. They are routinely denied access to the same opportunities for early, primary and secondary education or life-skills and vocational training that are available to other children. They either have no voice or their views are discounted. Although they are invariably more vulnerable to abuse and violence, their testimony is often ignored or dismissed. In this way, their isolation is perpetuated as they prepare for adult life.

Right to education and access to assistive devices for children with physical disabilities is a global concern. Nations all over the world make an effort to ensure equal opportunities to their citizens (WHO 2011). In the course of bringing this to realism, various global initiatives have taken place so far. These include initiatives like Education for All (EFA), World Program of Action (WPA) concerning persons with disabilities which is summarized by the Standard Rules on the equalization of Opportunities for Persons with disabilities (WPA 1992) and many others. Tanzania as a member of the International community has signed and ratified various International declarations that work towards equality in all walks of life, education and assistive devices being among them. Tanzania ratified the Salamanca Statement in 1994, a declaration that emphasizes on the need to provide basic education to children with special needs (Krohn N.A 2008). It signed the Convention on the Rights of the Child (UNICEF) in 1989 and ratified it in 1991 (UN Convention on the rights of the child 2007). In implementation of this Tanzania's parliament on November 6, 2009 passed a bill known as "The Law of the Children Act 2009. This law provides the legal framework through which the rights of the country's children can be protected. In November 2009 Tanzania ratified the UN Convention on the Rights of Persons with Disabilities (UN Treaty series 2008).

One has to realize the fact that for decades Tanzania has been dealing with the question of children with physical disabilities in a general manner and at worst without even a clear policy which could guide the authorities to address the children's needs (National Policy on Disability 2004). This has made it difficult to implement the rightful services and programs to children with physical disabilities. Policy can simply be defined as a principle that guides decisions which are put in place for the purpose of achieving the aspired outcomes (Davis and Wann 1993). That being the case, policy is a blueprint upon which the envisaged intentions are to be built on and given a clear reflection of whether they are a success or failure. Any serious phenomenon that runs without a Policy is like one driving a car into unpaved place with no road. Due to this, various stakeholders particularly Disabled Peoples Organization and others tirelessly urged the government to draft and put in place a policy that will address their issues seriously. The implementation of a national policy on disability in 2004 meant to meet these demands.

### 3.3.    Tanzania & Disability – Government Policy and Practice

The Convention on the Rights of People with Disabilities was negotiated from 2002 to 2006, making it the fastest negotiated human rights treaty. There were 82 signatories to the Convention, 44 signatories to the Optional Protocol, and 1ratification of the Convention. This is the highest number of signatories in history to a UN Convention on its opening day.

Although Tanzania is a signatory to the Declaration on the Rights of People with Disabilities (1975), Convention on the Rights of the Child (1989) and the Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1993) Tanzania has signed, but not ratified the Convention on the Rights of People with Disabilities nor the Optional Protocol. Since independence (1961) the Government through the Department of Social Welfare has been providing services to people with disabilities without a comprehensive policy. The adoption of the National Policy on Disability (NPD) in 2004 was the first time the Government concretizes its objectives towards providing for disabled people and this was appreciated by the Committee on the Rights of the Child in its 2006 report. Specifically the Tanzanian Government reported the status of the protection the rights of disabled children in the following ways:

**Legislation:** Whilst the rights of persons with disabilities are protected by general legislation through legal remedy in the courts, no new legislation concerning disability has been enacted since the adoption of the Rules.

**Accessibility:** There are rules ensuring accessibility of the build environment requiring that public places and the outdoor environment are made accessible. Accessibility in the build environment is observed by a national authority, local Governments and the organizers/providers of services. The only measure promoted by the Government in order to facilitate accessibility in the built environment is ensuring access to public places. There are no special transport arrangements for persons with disabilities. When planning to build accessible environments the most difficult obstacles are: economic/budgetary factors, technical factors, lack of planning and design-capacity, and lack of enforcement mechanisms. There is no disability awareness component incorporated in the training of planners, architects and construction engineers.

Sign language for deaf people has no officially recognized status. It is not used as the first language in education of deaf people, and not recognized as the main means of communication between deaf persons and others. There are no Government measures for encouraging media and other forms of public information to make their services accessible to persons with disabilities. The only service provided to facilitate information and communication between persons with disabilities and others is literature in Braille.

**Organizations of persons with disabilities:** There is a national umbrella organization where the following organizations are represented: the Tanzania Association of the Deaf, the Tanzania League of the Blind, the Albino Association, the Tanzania Society for Palsy and Mental Retardation. Legal provisions mandate the representatives of persons with disabilities to participate in policy-making and to work with Governmental institutions. Organizations of persons with disabilities are sometimes consulted when laws and regulations with a disability aspect are being prepared.

Mpango wa Kukuza na Kuondoa Umaskini Tanzania----Tanzania Poverty Reduction Stratage (MKUKUTA 2005-2010) attempts to mainstream disability into poverty reduction measures through its objectives relating to the prevention of childhood disability, improved survival, health and well-being of all children and women and especially vulnerable groups, and protection of disabled children's basic rights to education. But importantly, MKUKUTA does not explicitly look at disability either as a rights issue, poverty issue nor socially determined issue.

The failure to pass the Disability Bill in Parliament indicates that protecting the rights of disabled people is not a Government priority. Within the Ministry of Health and the Ministry of Education there are apparently no permanent secretaries who specialize in disability issues. In Ministry of Health planning disability is not explicitly addressed, even though it is the outcome of poor healthcare provision. Both the Ministry of Health and the Ministry of Community Development Gender and Children are committed to delivering projects that have been signed by donors with predetermined and ambitious outcomes. This does not leave them adequate freedom of movement to alter programming towards a greater emphasis on disability. Importantly, disability is not a priority within the donor partners, the World Bank, nor does it feature on the Millennium Development Goals. Whilst it could be argued that the achievement of the Goals related to

access to universal primary education, improved maternal outcomes would both reduce the numbers of disabled children and improve their access to services, it is a challenge that disability has become so mainstreamed into policy that it's become almost invisible. What this means in practice on the ground can be demonstrated by the following examples:

- It has been suggested that the Disability Bill has not been passed yet because it will demand that the Government spends money on each disabled child.

- The Social Welfare Department recently rounded up those with disability on the streets in Dar es Salaam and relocated them in Dodoma. These both violate their rights and are a short term solution.

- Whilst there are two special seats in Parliament for disability it has been argued that one MP who is Albino only defends the rights of albinos, thereby excluding the wider issues of the disabled community. Opinions vary on whether each type of disability (physical, mental, Blind, deaf etc) should have representation in the House. Certainly the disabled lobby is disunited and political, which could serve to undermine progress on advocating for equity of opportunity for all.

At the level of Local Government, which is where most people with disabilities come into contact with the State it is clear that the lack of investment in prevention and education for children with disabilities has caused most damage to individual children and families who desperately need assistance and to the moral of agencies trying to offer services.

## 3.4.    The Tanzania's National Policy on Disability

It was not until 2004 since independence in 1961 that the government through its Ministry of Labor, Youth Development and Sports issued the policy which is "The National Policy on Disability". The policy provides guidelines and sets parameters for services delivery by strongly focusing on the development, rights and dignity of People with disabilities. It covers a wide range of important areas education and assistive devices being among them, (National Policy on Disability 2004).

In education, the policy recognized the extent to which children with physical disabilities have been lagging behind others. It further puts open the various obstacles confronting education to children with physical disabilities, obstacles like inaccessible school facilities, poor school enrollment, presence of school curriculum and teacher education that does not incorporate the needs of children with physical disabilities, etc. On the policy statement: the government guaranteed to provide conducive environment for education that takes care of children with physical disabilities. (ibid)

For assistive devices, the policy documented the importance of assistive devices to enhance functional abilities for children with physical disabilities. Such devices include Prosthetics, Orthotics, Wheelchairs, Canes, Hearing aids, Braillers, etc. Furthermore the policy acknowledged that despite their importance they are not readily available and children with physical disabilities and their relatives have no information on where to get them. And when available they are too expensive for the majority of people with disabilities to afford. In its policy statement: the government promised to ensure easy access and information on the available devices, free assistive devices for families who cannot afford, government also promised to waive fees for imported assistive devices and to ensure production of low cost assistive devices. (ibid)

Furthermore the policy vision and direction which is built upon human rights and equality recognition that every Tanzanian citizen including children with physical disabilities have equal right to access basic needs. The policy view children with physical disabilities as potentials when properly educated and provide with assistive devices to ensure there full independent. Also the document outlined the policy objectives which are;

- To encourage the development of people with physical disabilities

- To empower families of people with physical disabilities

- To review/amend legislations that are not friendly to people with physical disabilities

- To improve service delivery

- To allow the participation of people with physical disabilities in decision making and implementation of important activities in the society

On its final chapter, the policy document explains the responsibilities of stakeholders to people with physical disabilities. The policy identifies and mentions principal stakeholders as the central government, local authorities, families/village communities and nongovernmental organizations. Generally this policy as documented in its vision and objective section aims at improving the situation of people with physical disabilities by means of encouraging their development, improving service delivery and identifying and developing their capabilities and talents. (idid)

## 3.5. Understanding of disability in Tanzania

The Tanzanian Government's Policy on Disability (2004) defines disability as "The loss or limitation of opportunities to take part in the normal life of the community on an equal level with others due to physical, mental or social factors" and a person with disability as "An individual whose prospects of obtaining and retaining an employment are greatly reduced due to known physical, mental or social factors." In this way the policy aligns with the socially constructed view of disability that it is the effects on a person's participation in community life and the community's perception of the individual that are critical factors. The social and environmental construction of disability means that in Tanzania albinism is considered a disability (whereas it would not in the West) because of the risk the condition poses to a person's eyes and skin in a tropical country.

Mr Gaudence Bunwenge, Ward Executive Leader in Mwanza expressed more simply that disability was "Upungufu fulani - Hali yao haifanane na mtu mzima" (A certain defect that means that their condition not the same as other people). It is noticeable that in Tanzania there exists an accepted paradigm that disability defines the individual. Consequently children are still referred to as 'handicapped' (Mbise, 2008). Additionally in many policy documents (MKUKUTA, Most Vulnerable Children policy) and reports disability is consigned to a generalized 'special need' group, along with orphans and street children. But in practice the methodology and interventions for working with each of these groups of children is quite distinct. Disability has been mainstreamed as another form of 'vulnerability' and in the process

seems to have become invisible, with few clear and tangible aims for improving the situation of vulnerable children in Tanzania.

## 3.6.     Children with disabilities in Tanzania

Disability statistics in low-income countries have so far largely comprised impairment-based prevalence figures. Eide and Loeb argue that prevalence in itself is of limited interest and that there is a need for data that can describe analyses and compare the situation among individuals with disabilities, as well as contribute to increased knowledge about the link between disability and poverty. They argue that in using the conceptual scheme inherent in the ICF (international classification of functioning, disability and health) model, an alternative approach to disability statistics may be developed. As an alternative to dividing the population into disabled and non-disabled, activity limitation and/or restrictions in social participation can be measured as a continuous variable among all regardless of the presence of any impairment (Eide & Loeb 2005).

There are an estimated 650 million persons with disabilities worldwide, or 10 per cent of the global population. Approximately two thirds live in developing countries. In certain developing countries nearly 20 per cent of the general population in some way has a disability; if the impact on their families is taken into account, 50 per cent of the population is affected. (Downloaded from: http://www.un.org/disabilities/default.asp?navid=11&pid=25 on 2nd October 2008)

Whilst there is no United Nations data on the number of children with disabilities in Tanzania, the following statistics have been generated from the Tanzanian Government's Poverty Monitoring Unit. Some analysts consider the national data sets to under-report the population with disabilities as a result of stigma. The Population Census in 2002 attempted to establish the extent to which the population experienced disabilities, reporting that 6% of the populations were disabled. From the 2002 Population and Housing Census, there were 1.7 million children with disabilities living in the mainland and just over 5,000 children with disabilities (1%) in Zanzibar. Most disabilities are physical disabilities (40%); others are mental (19%), multiple handicaps (14%), and speech/hearing impairments (13%). The Information Centre on Disability has contested these figures, arguing that the numbers are far higher.

At a street level many leaders have a clear sense of how many disabled are in their communities. They gathered the information through the Survey of Most Vulnerable Children, but given that many disabled children are isolated and hidden in the home it is possible that even at a street level these children are being unacknowledged. It is clear that much more needs to be understood about experiences of disability and the total number of children with disabilities (Save the Children 2007 and 2008).

## CHAPTER 4: Education and assistive devices

This chapter answers my first research question and it consists three sub-sections that present the attitude towards disabilities in Tanzania, the accessibility of education and assistive devices for children with physical disabilities in Tanzania, and different studies done in regards to education and assistive devices.

### 4.1.    Attitudes towards disability in Tanzania

Before I present the accessibility on education and assistive devices for children with physical disabilities, it is important to put forward the outlooks of Tanzania towards disability.  As UNICEF typifies the belief that children with disabilities experience discrimination and that this discrimination may affect their health and educational achievement; it may limit these children's opportunities for participation and put them at a higher risk of violence, abuse and exploitation. (UNICEF 2007). It is generally argued that deep and persistent negative stereotypes and prejudices against persons with certain conditions and differences prevail across the world. These attitudes shape who is considered to be a person with a disability (because disability is socially constructed) and contribute to a negative image of persons with disabilities. The language used to refer to persons with disabilities has played a significant role in the persistence of negative stereotypes. Clearly, terms such as "crippled" or "mentally retarded" are derogative. Other terms such as "wheelchair-bound" or "disabled persons" emphasize the disability before the person.

Kisanji (1993) describes attitudes towards people with disabilities in Tanzania and beyond as a mixture of persecution as well as tolerance. However, the tolerance shown has been paternalistic. People with disabilities were perceived as incapable of making their own decisions and of taking

control of their lives; they were viewed as people who always need to be helped or as objects of pity and charity (Coleridge 1993). Unfortunately, paternalistic attitudes tend to create dependency and an incapacitating learned helplessness in people with disabilities. It erodes the self-esteem of the recipient of charity (Oliver 1990, Kisanji 1993).

Kisanji examined Tanzanian proverbs about disability as an entry point to examining Tanzanian attitudes to disability. What he discovered was that in Tanzania there is an accepted and clear distinction made between an intellectual disability and mental illness. He also discovered that Tanzanian culture places more value on some parts of the body, or a combination of them, than others. Damage or loss of those parts held dear by the community determines the definition and severity of disability. He also explains that in addition to the commonly understood disabilities such as blindness, deafness, physical disability and intellectual impairment, Tanzanian culture also includes body shape, lack of attractiveness or ugliness as disabling conditions. Specifically, disability is perceived in Tanzania as a life and social leveler and persons with disability feature to highlight the community's moral and social duties and responsibilities. (Kisanji 1993).

Kisanji describes how proverbs indicate that Tanzanian culture supports active participation in appropriate activities (as training for survival and independence), demands parents take full responsibility in the care and upbringing of a child with disability, and values children (whatever the condition of those children). He also describes how disability is a source of inspiration for honesty and "good Samaritanism" (helping people in need). These attitudes are clearly positive, providing the basis for mutual understanding between disabled and nondisabled community members and promoting the quality of life within the "consciousness" of the community. He argues that the overall picture is one of 'tolerance, respect, care, assistance and integration.

There has been a shift in popular attitudes towards disability, which has not yet filtered through and become pervasive within society. What this means is that an individual's experience of other's attitudes really is dependent upon their context (rural versus urban), their family situation and a certain degree of luck.

For example a child who lives in a diverse community rather than a single tribal village that still upholds traditional taboos would have their right to life protected. The example of the current

conspiracy killings of albinos demonstrates that this fundamental right is not safe for many children. Whilst tribes such as the Maasai used to kills children with disability this is now considered unacceptable, but because the practice of killing children at birth is so hidden, and can occur for children who are not born in hospital the opportunity to kill children who have physical disabilities at birth still exists.

What has emerged as a real challenge in realizing disabled children's rights to participation is the attitude that they are passive victims of their situation. So whilst they may be treated with compassion they are rarely included by their families in decisions affecting them, nor offered opportunities and education to capture their potential.

When parents give birth to a child they naturally have expectations and ambition for that child. They also have a pragmatic desire that the child will eventually assist them in their old age. Understandably having a child with disability means that the parents' hopes and aspirations are very different. The popular consensus is that a child with disability is dependent, worthy of compassion, but certainly not someone to invest in with the hope that they will become independent and productive members of society. This results in a lack of investment in these children at the most basic level; which is so profound that it violates children's rights and compromises their development as humans. "Community and family attitudes to these children are to place them in a lower social status" (Mbise 2008)

Without a doubt parents and policy makers need to invest in children with disabilities, but this needs to be more than in the realm of basic services. We need to enable families to understand that every child has a right to strive towards their full potential. At the moment social perceptions actively undermines their potential. We need to challenge these attitudes and create an interface for children to articulate their own situation.

## 4.2.    Access to Education for children with physical disabilities in Tanzania

One of the key objectives of education in Tanzania is to promote and develop the potentials and personalities of all individuals so that they can bring about their personal development and be productive members of their societies and the country, in which they are a part. In order to achieve the goals of education for the country, the Tanzanian Ministry of Education and

Vocational Training (MOEVT), among other objectives, strives to promote access and equity to basic education by ensuring that all children have access to education (United Republic of Tanzania URT 2001). The MOEVT is particularly keen to ensuring that all underserved groups, including children with physical disabilities, have access to quality education (ibid.). In view of this, Tanzania has set several targets, including, among others, attaining Universal Primary Education by 2010 (ibid.). The prerequisite for achieving the goals and targets of Universal Primary Education is that, all children with school age, including those with physical disabilities and other special needs, need to be enrolled in and complete the full cycle of primary education.

Children with disabilities face significant hurdles in enrolling, attending and completing school. UNESCO (2010) argues, "Disability is one of the least visible but most potent factors in educational marginalization. Beyond the immediate health-related effects, physical and mental impairment carries a stigma that is often a basis for exclusion from society and school. Yet, there has been limited empirical analysis on the disabilities and access to schooling (Filmer 2008).

As the Tanzania government develops a policy on people with disabilities including children, it is essential to understand the current schooling status of children with disabilities. UNICEF (2008) reports that, "relatively little is known about the situation of children with disabilities globally, and in developing countries in particular." Therefore, using the 2008 Tanzania Disability Survey Report, the report examines schooling patterns of disabled children in Tanzania. Among the objectives of this report was:

- To extend our knowledge of the patterns of educational enrollment and attendance for children with disabilities, and

- Identify the major challenges of expanding education access for these children with disabilities. The results from the report show that primary school aged children i.e. 7-13 year; only 38.4 percent were attending school (Tanzania Disability survey 2008). This figure for children with disabilities is below the targets of MDGs which calls for 100 percent primary school enrolment by the year 2015.

There are three principal approaches to promoting the education of children with disabilities and other underserved groups, namely: special schools, integrated schools and inclusive education.

Special schools specifically cater for children with disabilities, in which these schools are run separately from mainstream schools. Integrated schools provide education for children with disabilities within the mainstream schools, but there are special classes to cater for children with special needs, including those with disabilities. Inclusive education promotes the education of all children in the same school and classroom environment, without discriminating them by disability or other special needs.

For many years, Tanzania has been promoting the education of children with disabilities through the provision of special needs education. Indeed, special needs education is one of the highly ranked priority educational sectors, along with early childhood care and development, primary education, adult education, secondary education and teacher education (URT 2001). Special needs education in Tanzania refers to education provided to children with disabilities. Accordingly, six categories of disabilities have been recognized, namely visual impairment, hearing impairment, intellectual impairment, physical disability, autism and the deaf blind (URT 2001).

Inclusive education has recently gained more prominence than other strategies in the field of education as the most effective strategy for achieving the goals and targets of education for all. Indeed, Tanzania has subscribed to several international conventions that promote inclusive education, including The Declaration of Children's Rights, 1386/1959, The Declaration of Disabled People's Rights, 3447/1975 and The Salamanca Statement and Framework for Action (UNESCO 1994). The Salamanca Statement and Framework for Action (UNESCO 1994), for example, reaffirmed the right to education of every individual, as enshrined in the 1948 Universal Declaration of Human Rights, and renewed the pledge made by the world community at the 1990 World Conference on Education for All to ensure that right for all regardless of individual differences. The guiding principle for the Salamanca framework is that schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions, including disabled and gifted children as well as children from disadvantaged and marginalized areas or groups.

Additionally, Tanzania has committed herself to the Education for All (EFA) goals and targets. Basic education for all requires assuring access, permanence, quality learning and full

participation and integration of all children, including those with disabilities (UNESCO 2000). This means that without the development of inclusive policies in education that will ensure all school age children have access to education, regardless of their individual difference, the EFA goals and targets cannot be achieved.

*"They don't want to be favored; they want to be given equal opportunities"*

That means if all children regardless of their conditions can be given equal opportunities in accessing social needs in their countries poverty among people with disability can be eliminated.

The Primary Education Development Plan (PEDP) emphasized enrolment and access to primary education as a critical plank in achieving the Education for All goals. Considerable progress was made in enrolment and PEDP II should now be building upon this. However, the conceptualization of 'access' under PEDP was partial as regards to children with disability. For a start PEDP concentrated on building new classrooms, but many children with disability in rural areas live too far from existing schools. What they needed was new schools to be built nearer to their homes. If you have a mobility disability it's still difficult to access school.

Importantly inclusive education will only work if facilities are improved both in old and new structures. Within schools there are access guidelines so that children can enter the buildings and move around, but these really are insufficiently implemented. For example the poor state of toilets in schools is positively dangerous for a child who moves around by crawling. Extraordinarily, in the Blind School in Musoma *"one child had a tricycle, but couldn't get to class through the doors. There's no ramp, no rails, in a Blind school!"* (Dennis Maina). Access is not just a question of getting to the school, but also a question of how the child accesses education. So with child with disability it is critical that the teacher can communicate and provide the child with the materials they need in order to learn. In practice the materials are not being made available to children and children with disabilities are not benefiting from the increases in the education sector budget.

## 4.3.    Access to assistive devices for children with physical disabilities in Tanzania.

Assistive devices enable persons with disabilities to achieve personal mobility, and access to these devices is a precondition for achieving equal opportunities, enjoying human rights and

living in dignity (UN 1993). The United Nations Convention on the Rights of Persons with Disabilities (CRPD) highlights the responsibility of States to take effective measures to ensure personal mobility with the greatest possible independence for persons with disabilities, and a corresponding responsibility to promote and ensure availability and access to these devices (UN 2006).

Furthermore, the United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities (UN 1993) and World Health Assembly resolution WHA58.23, "Disability, including prevention, management and rehabilitation" (WHO 2005a) also urge countries to facilitate access to appropriate assistive devices and to promote its development and other means that encourage the inclusion of people with disabilities in society.

Recent publications, such as Community-based rehabilitation: CBR guidelines (WHO 2010), Guidelines on the provision of manual wheelchairs in less-resourced settings (WHO 2008), Prosthetics and orthotics project and program guides (Landmine Survivors Network 2006) and Guidelines for training personnel in developing countries for prosthetics and orthotics services (WHO 2005) provide practical recommendations and support for countries in the area of assistive devices.

### 4.3.1. Understanding of assistive devices?

Assistive devices can be defined as "any piece of equipment, or product, whether it is acquired commercially, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of individuals with disabilities" (WHO 2011). Assistive devices are designed to facilitate or enhance a user's personal mobility – this relates to their ability to change and maintain body position and walk and move from one place to another (WHO 2001). Common examples include crutches, walking frames, wheeled walkers, wheelchairs (manual and powered), tricycles, scooters, orthoses and prostheses. Devices such as white canes are also considered mobility devices, as they assist people with visual impairments to move independently within their homes and communities.

### 4.3.2.  What are the important of assistive devices?

These devices are appropriate for children who experience mobility difficulties as a result of a broad range of health conditions and impairments, including amputation, arthritis, cerebral palsy, poliomyelitis, muscular dystrophy, spinal-cord injury, spinal bifida, stroke and visual impairment. They are also relevant for older people who experience mobility difficulties. Studies have shown that assistive devices, when appropriate to the user and the user's environment, have a significant impact on the level of independence and participation which people with disabilities are able to achieve (WHO 2011). They have been reported to reduce the need for formal support services (WHO 2011) as well as reduce the time and physical burden for caregivers (Allen et al. 2006). The use of these devices, in particular, creates opportunities for education and work, and contributes to improved health and quality of life (May-Teerink 1999; Eide & Oderud 2009; Shore 2008). Assistive devices may also have an impact on the prevention of falls, injuries, further impairments and premature death. Investment in provision of assistive devices can reduce health-care costs and economic vulnerability, and increase productivity and quality of life for children with physical disabilities (SIAT 2005).

### 4.3.3. Provision of assistive devices

Assistive devices can be provided by a broad range of stakeholders including governments, international agencies, nongovernmental organizations (including charitable and faith-based organizations), and the private sector. In Tanzania provision of assistive devices is done by nongovernmental organizations and private sectors. In some countries, other ministries take responsibility for the provision of mobility devices, for example the Ministry of Social Welfare in Eritrea, Ethiopia, India and Viet Nam. (WHO 2011). In other countries, such as Pakistan, the Syrian Arab Republic and Sri Lanka, the Ministry of Defence provides these devices primarily for army personnel and, in some cases, extends provision to civilians. Where government resources and capacity are limited, other stakeholders, including international organizations, such as the International Committee of the Red Cross (ICRC), may play a greater role in provision of mobility devices.

In low and middle income countries including Tanzania, only 5-15% of people including children with physical disabilities who require assistive devices have access to them. Production is low and often of limited quality. There are scarcity of personnel trained to manage the provision of such devices, especially at provincial and district level. In many setting access may be possible but cost are prohibitive. (WHO 2012).

Since the development, production and distribution of assistive devices are not an integral of the health care system in Tanzania, their provisional fall to nongovernmental and other private sectors. Because there is no central coordination for these efforts in many instant these devices are produced without adequately taking into account the need of people/children with disabilities, their living condition or environment. In case where external funding is in place, related programs often collapse when the funding is no longer available. (ibid)

In Tanzania children with physical disabilities may access these devices through a number of different facilities, including hospitals, rehabilitation facilities, mobile/outreach facilities and community based program and special education agencies. In total there are thirteen (13) orthopaedic centers in Tanzania, but of those only 5five centers are actively working. A variety of health personnel, especially rehabilitation personnel, are involved in the provision of mobility devices, including prosthetist and orthotist, orthopaedic technologists, therapists (e.g. occupational therapists and physiotherapists), medical staff (e.g. doctors and nurses) and community workers (e.g. community-based rehabilitation workers and community health workers).

The recent World report on disability estimated that more than a billion people live with some form of disability, which corresponds to approximately 15% of the world's population (WHO 2011). Analysis of World Health Survey data in 69 countries showed that 18.6% of adults over the age of 18 report most often having moderate, severe or extreme difficulty related to moving around (WHO 2011). This is supported by a study carried out in Fiji, India, Indonesia, Mongolia and the Philippines, which indicated that about one in five people has at least some difficulty walking or climbing stairs, and one in 20 people has severe difficulty (Mont 2007).

Global data on the need for rehabilitation services (including assistive devices) and estimates of unmet need are very limited (WHO 2011). It has been estimated that people needing orthoses or prostheses and related services represent 0.5% of the population in developing countries (WHO, 2005b) and that the number of people with disabilities in developing countries who require a wheelchair is approximately 1% of the population (ISPO/USAID/WHO 2006). The number of children with disabilities is projected to increase because factors such as road traffic crashes, natural disasters and conflicts contribute to increasing numbers of children with disabilities and suggest a corresponding increase in the need for assistive devices.

National studies on living conditions of people with disabilities conducted in Malawi, Mozambique, Namibia, Zambia and Zimbabwe revealed large gaps in the provision of assistive devices. (Loeb & Eide 2004; Eide & Kamaleri 2009; Eide, van Rooy & Loeb 2003; Eide & Loeb 2006; Eide et al. 2003). The studies found that only 17–37% of people received the assistive devices they needed. Gender inequalities were also evident in the proportion of individuals with disabilities who had an assistive device in both Malawi (men 25.3% and women 14.1%) and Zambia (men 15.7% and women 11.9%) (Loeb & Eide 2004; Eide & Loeb 2006)

For children with physical disabilities, the question of accessing assistive devices is very crucial. This derives from the fact that the services enhance the functional level and increase individual's level of self-dependence and participation in day to day social life. Therefore lack of access to these devices restricts an individual into inclusion and inertial situation. In Tanzania only 2.5 percent of children were using assistive devices the remaining 97.5 percent of children who needed these devices were not using. This is due to that fact that majority of children and their families were not aware of the services and those that are aware majority cannot afford the cost of these devices.

## CHAPTER 5:  Access and barriers

In chapter five I will present the answers for my second research question which explains the challenges faced by children with physical disabilities in accessing education and assistive devices as well as the findings of this thesis. But before I present the challenges let me present the enrolment of children with physical disabilities in schools.

## 5.1.    The enrolment of children with physical disabilities in Tanzanian schools

Since 2001, Tanzania has been implementing the Primary Education Program (PEDP), which aims to deliver sustainable and good quality basic education to all children of school age. The PEDP has achieved remarkable success, especially with regard to increase in primary school enrolment. For example, according to the Ministry of Education and Vocational Training (MOEVT) statistics, the Gross Enrolment Ratio at the primary school level increased from 78 % in 2000 to 114 % in 2007. Accordingly, the Net Enrolment Ratio increasing from 59 % in 2000 to 97 % in 2007; the enrolment of primary school children has increased from 7,083,063 in 2004 to 8,316,925 in 2007 (URT 2007)

There is a dearth of data on children with physical disabilities and other special needs in Tanzania, and therefore quite difficult to establish their proportion of enrolment in schools. In this research, an attempt was made to get these data through documentary analysis of educational statistics as well as analysis of the national educational statistics data.

According to the MOEVT statistics, by 2007, there were 24,003 students with disabilities in Tanzania, which is less than one percent of the total enrolment of primary school children (URT, 2007). Indeed, Government statistics show that only one percent (1%) of children with disabilities has access to basic education in Tanzania (URT 2001).

Table 1 below show the enrolment of children with disabilities in primary schools by June 2008, the data show that, by June 2008, there were about 34,661 students, 19, 998 boys and 14 663 girls, with disabilities enrolled in primary schools in the country. This show, a majority of students with disabilities enrolled in schools are in the categories of physical disabilities (40%), mental impairment (21%) and hearing impairment (17%).

Further, the data show that there are a higher proportion of male (57.7%) disabled students enrolled in schools than female (42.3%) (Table1). This is somewhat inconsistent with the primary school enrolment trends, in which the enrolment of male and female students is almost equal. For example, according to MOEVT statistics, the enrolment of female primary school students in 2008 was 49.6 % (URT, 2008). This therefore raises questions about whether the difference in enrolment between disabled schoolboys and girls is caused by the actual difference

of male and female children with disabilities in the society, or by the society's more favorable attitudes towards male disabled children than female. It should be noted, however, that these data do not give the overall picture of enrolment ratio of children with disabilities because they do not show the overall number of children who are of school age but are probably not enrolled in schools.

Table 1: Enrolment of children with disabilities in primary schools: national data 2008

| Type of disability | Boys | Girls | Total | %Girls | %Boys |
|---|---|---|---|---|---|
| Visual/Albino | 1713 | 1394 | 3107 | 44.9 | 55.1 |
| Hearing | 3180 | 2532 | 5712 | 44.3 | 55.7 |
| Physical | 8068 | 5783 | 13851 | 41.8 | 58.2 |
| Mental | 4296 | 2945 | 7241 | 40.7 | 59.3 |
| Autism | 296 | 231 | 527 | 43.8 | 56.2 |
| Multiple | 435 | 280 | 715 | 39.2 | 60.8 |
| Others | 2010 | 1498 | 3508 | 42.7 | 57.3 |
| Grand Total | 19998 | 14663 | 34661 | 42.3 | 57.7 |

Source: URT, 2008, pp.36-37 (Additional %age calculations by author)

In 2011, only 0.35 percent of all children enrolled in primary school were children with disabilities. In secondary schools, 0.3 per cent of boys and 0.25 percent of girls have disabilities. These percentages are extremely low when compared with the estimated 7.8 percent of the population with disabilities in Tanzania and indicates that most children with disability are not enrolled. There is no functioning national system for the identification and assessment of children with physical disabilities, and no coherent data to track or respond to their needs. For those children with disabilities who do enroll, regular attendance is often extremely difficult.

Girls with disability are more vulnerable to abuse including sexual abuse than boys. (UNICEF 2011)

Support to the education of children with disability is another feature of UNICEF's program as this group of children is often undeserved in educational provisions. There are basic statistics available on the number of children with disabilities enrolled in primary and secondary schools. However this information is limited. For example, there are issues with the categorizations used for these children in BEST and not enough is known about the achievement rate for these disadvantaged groups of children. A real concern remains the lack of information about children with disabilities who are not enrolled in school (Ibid).

## 5.2.    Challenges facing children with physical disabilities in school

Poor physical infrastructure: Poor school physical infrastructure as one of the major problems constraining the teaching of and learning for students with disabilities. The construction of school buildings, even those constructed under PEDP, did not take account and consideration of the needs of students with physical disabilities and other disabilities. As result, many students with disabilities, especially those with visual and physical disabilities, struggle in their movements from one point to another within school premises.

Indeed, physical infrastructure for many schools in Tanzania was found to be unfriendly and generally unsupportive for the needs of children with physical disabilities. The entrance to most buildings, for example, had long staircases that cannot be accessed by physically disabled students using wheel chairs.

The inappropriately designed school physical infrastructure is partly attributable to lack of special funds allocated to cater for the needs of Children with Disabilities but also partly to lack of understanding amongst the local community on educational needs for children with disabilities. In the absence of special grants for children with disabilities, it is very expensive to maintain children with disabilities in schools, especially in schools that have boarding facilities. In this case children with disabilities are facing serious problems, including lack of food, clothes and transport, especially when they fall ill.

In some cases where a school receives the assistance of Non-Government Organizations such as World Vision, have attempted to modify their school environment making them somewhat supportive and friendly to the needs of students with physical disabilities

**Lack of political will for policy makers**: The absence of political will to help the children with disabilities as made their life difficult. As I have pointed out, that it is very unfair to build classrooms which are not friendly for children with disabilities. Many politicians keep on saying that it is too costly to handle disabilities problem. This statement is unacceptable because children with disabilities are very few and can be supported fully by the government and Charitable organizations.

**Poor facilities**: Lack of learning materials is another problem constraining their learning. Many schools in Tanzania have enough chairs and tables for the student therefore many students struggle to get a chair to seat and this become more difficulty for a student with physical disability that cannot run fast to have the chair, so many of them are forced to seat down. Students with visual impaired, for example, have no books for them.

**Transport problems**: Children with physical disabilities do not have reliable means of transport from their homes to schools. Because of this they are always late in attending classes as a considerable amount of time is lost in travelling. Public transports in Tanzania are not friendly for wheelchair users as there is no place to keep their wheelchair.

**Feelings of neglect by and dissatisfaction with teachers**: It was observed that the type of education received by children with disabilities is of very poor quality, noting that they did not consider themselves as receiving any education! This may be due to the fact that, there are very few education centers which provide training for teachers in special education, so the available teachers are not knowledgeable on teaching children with physical disabilities

**Stigma**: Another problem is stigmatization and embarrassment perpetrated by other students, portrayed by laughing and name calling.

### 5.3.    Findings

The findings of this study indicate children with physical disabilities face significant obstacles to schooling. These children are significantly less likely to enroll in school, attend school, and complete Grade 7. Many children with disability do not enroll in school. The social stigma and prejudice may discourage parents from sending their children to school (Kristensen et al 2006; UNICEF 2008; UNESCO 2010). This limited enrollment is also due to the lack of resources in special and regular schools and the prejudice that attend regular schools (UNESCO 2010). UNESCO (2010) also found that many schools, especially in rural and slum areas, are physically inaccessible to children with physical disabilities.

For those children with disability who do enroll in school grade progression is very poor. The lack of enrollment and progression suggest obstacles in school and in the households. Overall Grade 7 completion is low for all children in Tanzania, but it is significantly lower for children with physical disabilities. The poor progression may be due to limited resources, lack of proper assessment, poorly trained teachers, and limited parental support (Kristensen et al 2006). Kristensen at al (2006) found that, "many parents did not visit their children once they had been admitted to a special school, neither did they take the children home on school vacations." Without parental support these children are unlikely to succeed in school.

### 5.4.    Assistive devices for children with physical disabilities in Tanzania

Economic and social development measures are key factors in improving health, lengthening life, and improving the quality of living of any individual. While development tends to decrease the overall risks of ill health and disablement, people with disabilities are an increasing subgroup as population's age and child survival rates increase.

People with disabilities tend to be disempowered and deprived of economic and social opportunities and security because of social and physical barriers in society. They tend to be poor by all poverty standards—material deprivation, low human development, lack of voice and influence, and acute vulnerability to economic, social, and health risks. Furthermore, they are also underserved by most public and private institutions and services. As a result; people with disabilities tend to be the poorest of the poor. Children with physical disabilities in particular are

vulnerable to poverty because they often have few economic means and may resort to begging for survival.

Children with physical disabilities need access to the same basic health services as other population groups. However, children with physical disabilities are exposed to greater health risks than the nondisabled population groups because of poorer living conditions, low incomes, and poverty. They need a basic health care package that is available at the community level and a referral system for more demanding services. (Basic services related to disability are gene rally not automatically available at the community level as part of the health care system.)

The health sector should be prepared to meet the demand for prevention programs, curative interventions, such as corrective surgery and medical rehabilitation, and assistive devices, particularly wheelchairs, orthoses, prostheses etc. Specific disability-related health services require some level of specialized knowledge that is not part of standard health sector training. In accordance with the primary health care strategy, the basic health service package should be available at the community level. If general health services are inaccessible, inappropriate, or unaffordable by people with disabilities, the demand for general services may flow into the more expensive system of special services. Often services are beyond the reach of most people with disabilities, especially those in rural areas, leaving them with no access to needed services.

## 5.5. Barriers in accessing assistive devices in Tanzania

**Leadership and governance**: The provision of mobility devices is generally a low area of priority for many governments in the developing countries including Tanzania and, as a result, it is often not reflected in national legislation, policies or strategies. A global survey carried out in 2005 on the implementation of the United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities showed that, of 114 countries that responded to the survey, 50% including Tanzania had not passed relevant legislation, and 48% did not have policies in place relating to the provision of assistive devices (South-North Centre for Dialogue and Development, 2006).

**Physical environment**: A number of barriers within a person's environment can limit a child with physical disability and the use of assistive devices. Physical barriers can make it difficult or

impossible to use assistive devices effectively (Wearmouth & Wielandt, 2009; Ameratunga et al., 2009). For example, an individual will not be able to use a wheelchair of good quality in an inaccessible house, school or workplace. In Tanzania many buildings, including schools, banks, government offices, and sport places are not accessible for children with physical disabilities.

**Awareness, cultural and social barriers**: Researcher find out that many children with physical disabilities and their families in the developing world including Tanzania have limited awareness of the benefits of assistive devices and the services available to ensure access to them. For example, a study on the living conditions of people with disabilities in Lesotho demonstrated that there was a gap of 25.4% between the expressed need for assistive device services and awareness of these services (Kamaleri & Eide 2011). Social and cultural barriers may also affect the use of mobility devices – for example, orthoses for lower-limb weakness often come ready-fitted with a shoe, which means they cannot be used in places of worship and homes where shoes are not allowed. Children in need of assistive devices face obstacles in accessing them because of their sex, age, socioeconomic status, impairment or place of residence (Eide & Loeb 2006)

**Affordability**: Limited financial resources for many families living with children who are physically disabled in Tanzania have a significant impact on accessing of assistive devices and related services for their children. In the 2005 global survey mentioned that, 36% of countries Tanzania being among these countries had not allocated financial resources for developing and supplying assistive devices (South-North Centre for Dialogue and Development 2006). Many countries including Tanzania rely on out-of-pocket payments as a means of financing, which may suggest why children with physical disabilities and their families purchase more than half of all assistive devices directly (Albrecht et al. 2003). Affordability has been highlighted as one of the main reasons why children with physical disabilities do not receive needed health care in Tanzania – with higher rates of unemployment and poverty than nondisabled people, many children with physical disabilities are unable to afford assistive devices and related services (WHO 2011).

**Service delivery**: Services relating to provision of assistive devices include referral, assessment, prescription, funding, ordering, product preparation, fitting/adjusting, user training, follow-up, and maintenance and repairs. In Tanzania these services are often in short supply and located far

from the places where most children with physical disabilities live. Where nongovernmental organizations are involved in service delivery, they rarely have the financial means or capacity to develop sustainable service delivery systems for the whole country. Their services are often focused on providing specific types of devices, and targeted at specific types of disability, age groups and/or geographical areas. Where available, services are often centralized in major rehabilitation centers in large cities. Travelling to these centers can be costly and time consuming for children with physical disabilities and their families, and public transport is often not accessible (Dejong et al. 2002; Penny et al. 2007). In many centers in Tanzania, services relating to the provision of assistive devices are often inadequate and of low quality due to the fact that materials and components are not always available. Inadequate service delivery can put children with physical disabilities at risk of secondary conditions, for example if prostheses are not fitted properly, the device may be abandoned, or if wheelchairs are provided without appropriate cushions, pressure sores can develop.

**Human resources**: Lack of properly trained personnel constitutes a major barrier to provision of appropriate assistive device services (Pearlman et al. 2008; Jensen et al. 2004, Magnusson & Ramstrand 2009). Many countries report inadequate, unstable or nonexistent supplies of rehabilitation personnel (WHO 2011; Bo et al., 2008; Stanmore & Waterman, 2007; Al Mahdy 2002), and unequal geographical distribution of these personnel. Tanzania faces the same challenge, there is a very high shortage of rehabilitation personnel (including prosthetists, ortotists, rehabilitation doctor, occupational therapist and physiotherapists) resulting in very limited access to therapy and assistive technologies (Tinney et al. 2007). Many developing countries do not have educational programs for rehabilitation professionals. For example, according to 2005 global survey mentioned that, 37 countries had not taken action to train rehabilitation personnel and 56 countries had not updated the medical knowledge of health-care providers on disability (South-North Centre for Dialogue and Development 2006). Various manuals and guidelines and training programs have been developed (WHO 2008), but implementation is not universal and often under resourced. In addition to the lack of trained personnel, existing personnel do not have access to continuing education programs which allow them to maintain and update their skills and knowledge.

**Production**: In Tanzania, the production of assistive devices occurs on big cities in some regions it doesn't exist. There is limited access to the materials and equipment needed to produce assistive devices. Market-related factors also limit the production, for example lack of awareness limit the demand for assistive devices because children with physical disabilities and their families in many areas in Tanzania are often unaware of the existence and benefits of these devices and may have limited purchasing capacity. With a restricted market, there are few/no incentives for the public or private sector to engage in the production of assistive devices. Where local markets are too small, local production may not be cost-effective. Duty and import taxes associated with assistive devices are also discouraging local businesses from importing them.

## 5.6.    Findings

In this thesis, the researcher found that access to assistive devices for children with physical disabilities in Tanzania is the challenge. With the population of about 45 million people and 1.7 million children with disabilities in Tanzania only five (5) Orthoapedic centers are actively working. The remaining eight (8) centers are dormant. The dormant of many Orthopaedic centers is due to lack of materials, components and trained personnel. Not only that but also out of the five centers only one center in run by the government the remaining 4 are run by private sectors. Putting in mind that the cost of assistive devices is expensive and the purchase of assistive devices in Tanzania is out of pocket this indicates that many children with physical disabilities and their families fail to afford. And this condition is even worse in private centers whereby profit in the central point of their business.

Access to assistive devices program as it was introduced in 1995 is a very commendable effort which is in line with MKUKUTA strategy as it aim to ensures that there is no group in our community which is left without adequate skills and knowledge to support them in poverty alleviation. But the implementation of this program has not yet taken place up today.

Although producers of goods and services are increasingly introducing accessibility as a criterion, the practice is still rare in Tanzania. The costs induced by producers and poor design tend to fall on disabled consumers. Accessibility is largely a public good and its implementation usually requires public intervention. In Tanzania only 2.5 percent of children living with physical

disabilities have access to comprehensive rehabilitation and appropriate basic services the remaining 97.5 percent of children who needed these services did not have access to it. Services are scarce while costs of transport and existing services are prohibitively high for most children and their families. In addition, people are often unaware of the availability of services (CCBRT report 2012).

It is clear from the findings that disability is experienced differently depending on the nature of the disability. Physical disabilities carry high stigma and require extra resources. Consequently, children with disabilities are less likely to be given equal opportunities as non-disabled are. Given this experience of children with disabilities, the Tanzania government need to enact polices that take into consideration the nature and severity of the disability. This will probably be the greatest challenge for the Tanzania government. Providing resources and materials to serve all the children with disabilities will require increased financing to train teachers, provide educational materials and assistive devices like prosthesis, orthosis, wheelchairs and hearing aids, and financial support for families.

It is clear from this study that children with physical disabilities in Tanzania face significant challenges in society.  If the Tanzanian government is to reach children with physical disabilities in sense of equalization of opportunity for all they will need to develop procedures for proper assessment of the disabilities, collect more accurate and reliable data, train teachers for the different forms of disabilities, and provide all schools with educational resources and ensure the availability of quality and affordable assistive devices to serve these children.

## CHAPTER 6: Discussion, Conclusion and Recommendations

### 6.1.    Discussion

This research has examined the challenges and opportunities concerning the accessibility to education and assistive devices for children with physical disabilities in Tanzanian. Several issues have emerged.

First, the research has revealed that a very small proportion of children with disabilities who are of school age are actually enrolled in schools. For example, Government national statistics show

that only one % of children with disabilities of school age have access to basic education Furthermore, statistics gathered in this research show that the school enrolment of children with disabilities is far below the national average. This clearly contradicts government's efforts to achieve the education for all goals and targets. Indeed, if the school under-enrolment of children with disabilities is not addressed, the PEDP achievements on school enrolment, enrolment and the education for all objectives as a whole may be undermined. Effectively, the over 80 % success of school enrolment that has been achieved in the PEDP is only relevant to mainstream children but does not wholly apply to children with physical disabilities

Second, though the Government is keen in promoting the philosophy of inclusive education as the most reliable and appropriate strategy to promoting the education of children with disabilities, only a few schools in the country are currently having inclusive education classes. Indeed, a majority of children with physical disabilities enrolled in schools attend special schools and/or integrated classes rather than inclusive education classes. Several factors including lack of training among teachers regarding teaching special needs and inclusive education in general and handling children with disabilities in particular are constraining the implementation of inclusive education mainly attributable to the feelings of inadequacy and incompetence to handle inclusive education classes. Generally speaking, under the current situation, whereby only a few teachers are trained in special education, it is more appropriate to maintain special schools or integrated classes than to promote inclusive education, which would only work if, among other factors, almost all teachers are trained.

Third, the potential of assistive devices to promote social and community participation of children with physical disabilities lies hugely unrealized as children in less-resourced settings continue to experience limited access, awareness and acquisition of needed technology products. Estimates suggest that only 2.5% of children who need assistive devices have access. There are many different factors that impact their availability and optimum use in a community relevant legislation and regulations, sustainable and wide-reaching service delivery systems and distribution channels, funding mechanisms, trained practitioners and service delivery personnel, and maintenance and repair services. Furthermore, having access to assistive devices may be necessary, but not sufficient, to ensure the mainstreaming and inclusion of children with

disabilities in their communities. Without accessible environments including accessible schools, public spaces, roads, and accessible modes of transportation, children with physical disabilities will not be able to fully realize the potential of assistive devices.

Fourth, the results of this research suggest a number of factors that may be constraining the access to education and assistive devices for children with physical disabilities. Firstly, many schools in Tanzania especially government school are inaccessible to children with disabilities, especially physical and visual impairments. Secondly, community have little or poor understanding of disability issues. This has consequences and implications on the identification and recognition of children with disabilities and other special needs. Coupled with the negative attitudes towards disability among policy makers, these factors clearly point to the fact that schools are generally ill prepared and inadequately equipped to receiving and educating children with disabilities.

Perhaps the biggest barrier, which sums up all the above impediments to education and assistive devices for children with physical disabilities, is the fact not much concerted institutionalized efforts are being made to break these barriers. There is little mention or concern about children with disabilities in the PEDP and other government policy documents; neither is it in the statutes of most non-governmental organizations concerned with provision of education and assistive devices in Tanzania.

## 6.2.    Conclusion

While the government efforts in improving the access to and the quality of basic education and assistive devices for children with physical disabilities are generally impressive and commendable, the situation is quite gloomy when such efforts are examined with respect to the education and accessibility of assistive devices for children with disabilities. The results of this research have revealed that the current efforts to improve the delivery of basic education have not taken account of the special needs of children with physical disabilities. Consequently, children with disabilities have not enjoyed the achievements of the PEDP and other ongoing educational reforms in the country. Furthermore these children still faces many obstacles in accessing quality and affordable assistive devices.

This research has uncovered several factors that constrain the provision of quality education and affordable assistive devices to children with physical disabilities in the Tanzania. These include first, the attitudinal and physical barriers to education and the use of assistive devices, in which the school teaching and learning infrastructure is generally inaccessible to children with physical disabilities. Second, materials and components for production of assistive devices are expensive. Third, the majority of people including teachers and policy makers have little understanding of disability issues. This has had consequences and implications on the identification and recognition of special needs for children with disabilities in schools. Fourth, not many parents of children with disabilities have been willing to send their children to schools for enrolment. As a result many children with disabilities who are of school age are not identified and therefore not enrolled in schools. Fifth, coupled with the parents' unwillingness to enroll their children in schools, there is also the problem of insensitivity of the disability issues in the society; the society is yet to appreciate and recognize the importance of educating and services for children with disabilities alongside other children so that they can also acquire necessary skills to be able to lead fully and independent life. Although the main objective of National Policy on Disability was too ensure equal opportunity and improve the situation of people with disability but still much has to be done to bring this objective into realism.

## 6.3. Recommendations

Two major issues have emerged from this research that require attention by a way of policy actions and further research. Firstly, the research has identified attitudinal and infrastructural barriers to the access to education and assistive devices for children with physical disabilities, which need to be broken if we are to change the plight of these children's future. Secondly, the research has revealed a gap in knowledge about the teaching and learning environment for children with physical disabilities. There is particularly a lack of national data on the access to education and assistive devices for children with physical disabilities, which calls for the need to conduct a large-scale research that would paint a comprehensive picture of the plight of education assistive devices for children with disabilities in the country. In the view of the above observations, the following recommendations for policy and further research are made.

**For policy action**

Many schools are inaccessible to children with physical disabilities. This implies that the construction of school buildings, including those built under the PEDP, did not take into consideration the needs and circumstances of children with disabilities. There is therefore need, probably in the current phase of PEDP, to modify the school buildings so as to make them accessible to children with physical disabilities. Additionally, there is a need for the national legal and policy framework that will make it mandatory for the future construction of school buildings and other places to take into account the needs of children with physical disabilities.

This research has observed a wide spread apathy and a lack of appreciation and recognition of the needs of assistive devices for children with physical disabilities among key stakeholders of the health sector and the public at large. There is therefore a need for awareness raising campaigns about the plight and importance of assistive devices for children with physical disabilities throughout the country. These campaigns could and should raise the profile of service needs for children with disabilities, making it clear that the MKUKUTA (poverty eradication strategy) and PEDP targets of ensuring all children have access to education in order to eradicate poverty will not be achieved without ensuring that all children with disabilities are also enrolled in schools along with other children and braking social and environmental barriers faced by children with physical disabilities.

Involve people with disabilities and their family members while formulating and implementing policies, laws, and services related to provision of assistive devices. Disabled people's organizations or parents' groups can be a good resource for developing a national system for provision of assistive devices.

Include the provision of assistive devices within the national plan of action on disability/ rehabilitation with the following actions:

- Increase public awareness and understanding of the need for and benefit of assistive devices.

- Provide flexible and innovative financing strategies to ensure that assistive devices are affordable and accessible to all. For example, include the provision of assistive devices under health insurance and social protection schemes, and provide targeted funding for people who are unable to afford devices

- Increase the production/procurement of common types of assistive devices and/or their components. Where manufacturing of assistive devices.is not feasible within the country, explore alternatives, such as exemption from customs or import tax on assistive devices and/or their components to make them accessible and affordable.

- Develop or strengthen rehabilitation services and programs required for the provision of assistive devices by setting up national or regional resource and distribution centers for cost-effective sourcing and supply of a wide range of products.

- Ensure services are available as close as possible to people's own communities, including rural areas;

- Develop or adopt relevant technical standards and guidelines to ensure that devices made available to users are of an appropriate and reliable quality.

- Ensure education and training opportunities are available (in-country or abroad) to develop a suitable workforce for the provision of mobility devices and strengthen the knowledge and skills of existing personnel.

- Develop or improve data collection/health information systems to capture data on the need for and use of assistive devices and, at the same time, to strengthen and support research activities on cost-effectiveness and impact of mobility device provision in enhancing the quality of life and well-being of people with disabilities and their families.

## REFFERENCE

Albrecht G, Seelman K, Bury M (2003). *Handbook of disability studies*. London, Sage.

Allen S, Resnik L, Roy J (2006). Promoting independence for wheelchair users: *the role of home Accommodations.* Gerontologist, 46:1:115–123.

Al Mahdy H (2002). Rehabilitation and community services in Iran. *Clinician in Management*,

Ameratunga S et al. (2009). Rehabilitation of the injured child. *Bulletin of the World Health Organization*, 87:327.

Assistive Technology Act of 2004 (Pub. L. 108–364) 29 U.S.C. x 3001 et seq. Internet. 2004. Electronic Citation. http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname¼ 108_cong_public_laws&docid¼f:publ364.108. Last accessed March 2011

Bo W et al. (2008). The demand for rehabilitation therapists in Beijing health organizations over the next five years. *Disability and Rehabilitation*

CCBRT.http://www.ccbrt.or.tz/uploads/media/Summary_of_Persons_with_Disabilities_Act_20 0.pdf

Chambliss, D. F. and Schutt, Russel, K. 2006 Making sense of the social world*: Methods of investigation*, California: Pine Forge Press.

Dejong G et al. (2002). The organization and financing of health services for persons with disabilities. *The Milbank Quarterly*, 80:261–301.

Davis G, Wanna J,(1993), Public Policy in Australia, Allen and Unwin. Davydov, V.V. (1988), The Concept of Theoretical Generalization and Problems of Educational Psychology. Studies in Soviet Thought.

Eide A. H, Kamaleri Y, eds. (2009). Living conditions among people with disabilities in Mozambique*: A national representative study*. Oslo, SINTEF Health Research. (http://www.doh.gov. za/docs/factsheets/guidelines/rehabilitation.html, accessed 19 October 2011).

Eide A. H, Loeb ME, eds. (2006). Living conditions among people with activity limitations in Zambia. *A national representative study*. Oslo, SINTEF Health Research.

Eide A. H, van Rooy G, Loeb ME (2003). Living conditions among people with activity limitations in Namibia. *A representative national survey*. Oslo, SINTEF Health Research

Eide AH et al. (2003). Living conditions among people with activity limitations in Zimbabwe. *A representative regional survey*. Oslo, SINTEF Health Research

Golafshani N, (2003), Understanding Reliability and Validity in Qualitative Research;

*Qualitative Report,* Vol. 8 (4), pp 597-607, University of Toronto Canada

International Standard ISO 9999, 3rd ed. Technical aids for persons with disabilities

*Classification and terminology*. Switzerland: International Organization for Standardization; 2002.

ISPO/USAID/WHO (2006). *Report of consensus conference on wheelchairs for developing*

*countries. Bengaluru, India, 6–11 November 2006* (http://www.who.int/disabilities/Mont D (2007). Measuring disability prevalence. In: World Bank (2007). *SP Discussion Paper No. 0706*. Washington, D.C.

Jensen J. S et al. (2004). Clinical field follow-up of high density polyethylene (HDPE)-Jaipur

prosthetic technology for transfemoral amputees. *Prosthetics and Orthotics International*,

Kisanj J. (1993), Attitudes and Beliefs about Disability in Tanzania. *International Journal of*

*Disability, Development and Education.* Volume 42, Issue 2, 1995

Kristensen, K. Omagar-Loican, M., Onen, N. and Okot, D. (2006) Opportunities for Inclusion?

The education of learners with special educational needs and disabilities in special schools in Uganda. *British Journal of Special Education*

Landmine Survivors Network (2006a). Prosthetics and orthotics programme guide*: implementing*

*P&O services in low-income settings.* Geneva (www.usispo.org/assets/pdf/Programme_ Guide_Final_Version.pdf , accessed 19 October 2011).

Loeb ME, Eide AH, eds. (2004). *Living conditions among people with activity limitations in*

*Malawi: A national representative study*. Oslo, SINTEF Health Research.

Magnusson L, Ramstrand N (2009). Prosthetist/orthotist educational experience & professional

development in Pakistan. *Disability and Rehabilitation: Assistive Technology*, 4:385– 392.

May-Teerink T (1999). A survey of rehabilitative services and people coping with physical

disabilities in Uganda, East Africa. *International Journal of Rehabilitation Research*

Mont D (2007). Measuring disability prevalence. In: World Bank (2007). *SP Discussion Paper*

*No. 0706*. Washington, D.C.

Mhehe E.G (2002), Women's Enrolment and Participation at the Open University of Tanzania,

Doctorate Thesis, University of Alberta.

National Policy on Disability, (2004), Ministry of Labour, Youth Development and Sports, July
2004, Tanzania.

Oliver, M. (1996).Understanding disability. *from theory to practice*. Basingstoke: Macmillan.

Omari I.M, Mbise A.S, Malekela G.A, Besha M.P & Mahenge S.T (1983), Universal Primary
Education in Tanzania, International Development Research Centre, Ottawa, Canada

Pearlman J et al. (2008). Lower-limb prostheses and wheelchairs in low-income countries: An
overview. *IEEE Engineering in Medicine and Biology Magazine*, 27:12–22.

Penny N et al. (2007). Community-based rehabilitation and orthopaedic surgery for children with
motor impairment in an African context. *Disability and Rehabilitation*, 29:839–843.

Pope, C. *et al* 2007 Synthesising qualitative and quantitative health *evidence: A guide to
methods.* Maidenhead: Open University Press.

SIAT (2005). Rollatorns betydelse för äldre med rörelsehinder *[Importance of rollators for older
people with reduced mobility]*. Stockholm, Swedish Institute of Assistive Technology.

South-North Centre for Dialogue and Development (2006). *Global survey on government action
on the implementation of the Standard Rules on the Equalization of Opportunities for
Persons with Disabilities*. Amman, Office of the United Nations Special Rapporteur on
Disabilities.

Stanmore E, Waterman H (2007). Crossing professional and organizational boundaries: the
implementation of generic rehabilitation assistants within three organizations in the
northwest of England. *Disability and Rehabilitation*

Tanzania Human Rights Report 2010, (2011), Legal and Human Rights Center, Dar es Salaam.

Tanzania National Bureau of Statistics (2008), Preliminary results of 2008 Tanzania Disability
Survey.

TenMet, (2007), Tanzania Education Network, Strengthening Education in Tanzania: CSO
Contribution to the Education Sector Review 2007, Dar es Salaam.

Tinney MJ et al. (2007). Medical rehabilitation in Ghana. *Disability and Rehabilitation*

UNESCO (2010). *Reaching the  marginalized*. EFA Global Monitoring Report 2010. Oxford:
Oxford University Press

UNESCO (2005). *Education for All: The Quality Imperative*. EFA Global Monitoring Report

    2005, Paris: UNESCO

UNESCO (2004) *The Right to Education for Persons with Disabilities: Towards Inclusion*.

    EFA Flagship
    http://www.unesco.org/education/efa/know_sharing/flagship_initiatives/disability_last_version.shtml

UNESCO(2000). Inclusion in Education. *The participation of disabled learners*. Paris, France

UNICEF (2008) Monitoring Child Disability in Developing Countries*: Results From the*

    *Multiple Indicator Cluster Surveys*: United Nations Children's Fund, Division of Policy

    and Practice: New York

UN (2008) *The Millennium Development Goals Report 2008*. New York: DESA

United Nations Children's Fund (UNICEF), 2008 *Quantitative analysis of the impact of the*

    *Child Support Grant*. Pretoria: UNICEF.
    http://www.unicef.org/southafrica/SAF_resources_qachildsupport.pdf

United Nations, 2000 *Enhancing social protection and reducing vulnerability in a globalizing*

    *world. Report of the Secretary General to the Thirty-ninth Session E/CN.5/20001/2*.
    Washington D.C.: United Nations Economic and Social Council.
    http://www.icsw.org/un-news/pdfs/csdsocprotect.PDF

United Nations Educational Scientific and Cultural Organization (UNESCO) [1994].

    *The Salamanca Statement and Framework for Action on special needs education*. Paris:
    UNESCO.

United Republic of Tanzania [URT] (2008). Basic Education Statistics in Tanzania: National

    data, 2008.

UN Treaty Series (2008), Treaties and International Agreements Registered or filed and recorded

    with the Secretariat of the UN, Vol.2515, p.3.

URT (2007). Basic Education Statistics in Tanzania: National data, 2007.

URT (2001). *The education and training development programme document. Final Report*.

    Dar es Salaam: Ministry of Education and Culture.

URT (2001). *Education in a global era: Challenges to equity, opportunity for diversity*.

Dar es Salaam: Ministry of Education and Culture.

Wearmouth H, Wielandt T (2009). 'Reserve is no place for a wheelchair': Challenges to consider during wheelchair provision intended for use in First Nations community. *Disability and Rehabilitation: Assistive Technology*

World Bank (2009). *People with disabilities in India: from commitments to outcomes.* Washington, D.C. (http:// siteresources.worldbank.org/INDIAEXTN/Resources/295583 1171456325808/DISABILITYREPORTFINALNOV2007.

World Program of Action concerning disabled Persons*, U.N Department of Public information (1992), University of Michigan.*

WHO  (2011). World Report on Disability. Geneva, Switzerland, World Health Organization