AgrAbility The State of Rehabilitation Services in Africa- Agrability for Africa

Rehabilitation:

Branch of medicine that aims to enhance and restore functional ability And quality of life to people with physical impairment or disabilities

Types:

- Occupational (Vocational)
- Physical
- Speech

A- Physical Rehabilitation – Enhances ability of people with disability – Non-work related

B-Vocational Rehabilitation (VR) - Vocational rehabilitation is designed around obtaining and retaining employment

Need for Africa –

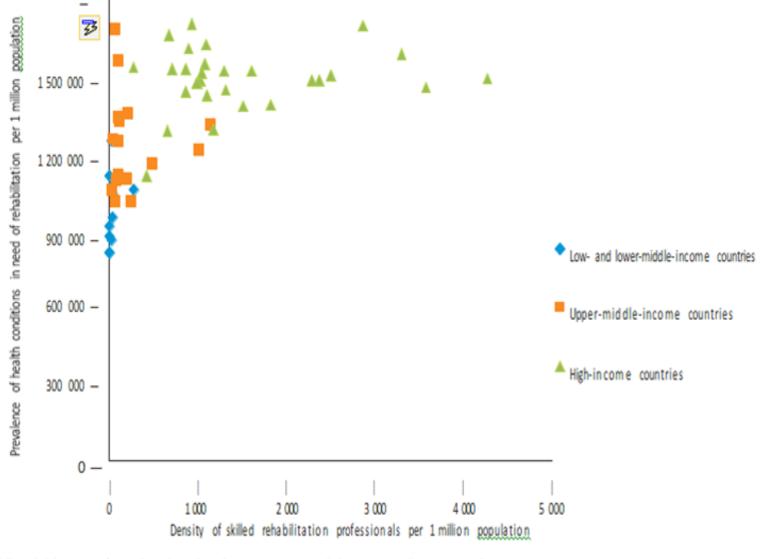
Farmer Rehabilitation Focused Rehabilitation program

- According to the Work Health Organization, only 2% of the disable individuals access rehabilitation services while only 1 to 2 individual in every 10 people access rehabilitation services in Africa
- And chance of rural farmer in Africa with a disability to meet a physician who specializes in appropriate care is zero

Implies that of the over 60% of population employed in Agriculture- once faced with a disability that requires vocational rehabilitation to enable one to remain farming— you have zero chance to return to work

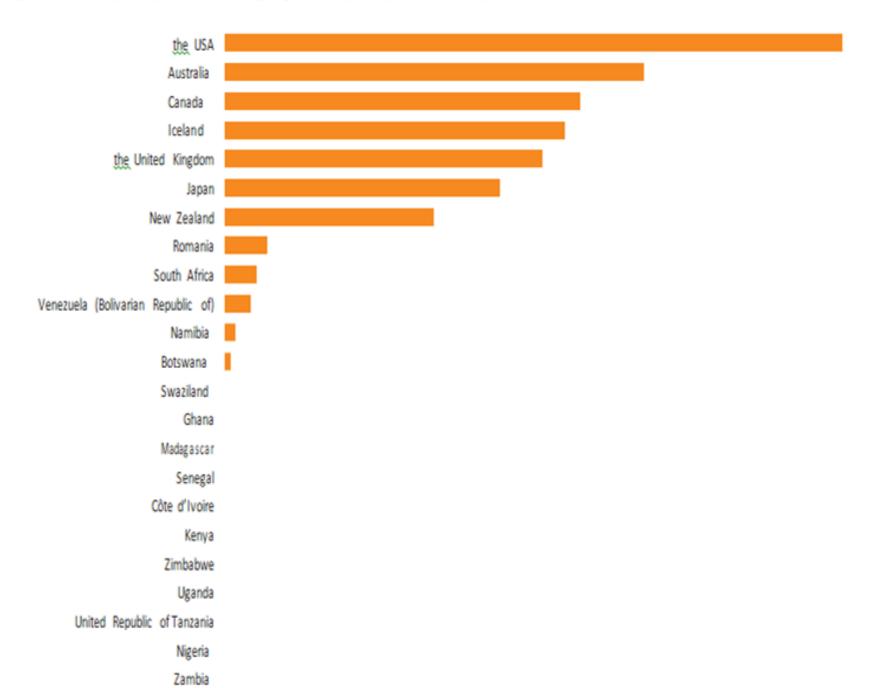
NOTE: **Disability prevalence rate in Africa** - Currently 80% of the world's disabled population lives in low-income countries, such as those of Sub-Saharan Africa.

Figure 1 Prevalence of rehabilitation-relevant health conditions compared to the density of skilled rehabilitation professionals in 12 low and lower-middle income countries, 16 upper-middle income countries, and 31 high-income countries per 1 million populations



Note: Skilled rehabilitation professionals include physiotherapists, occupational therapists, prosthetists, and orthotists. Source: WHO's Global Atlas of the Health Workforce (18) ISPO, WCPT, WFOT, OECD.

Figure 2 Density of speech and language therapists per 1 million populations in 27 countries



State Physical and Rehabilitation Medicine (PRM)-rehabilitation services and assistive devices

The role replaced by Orthopedic:

- They look to orthopedic surgeons -to perform the services.
- Rehabilitation Institutionalized
- Focused on Physical rehabilitation

No, Community-Based Rehabilitation strategy –Largely seen as equated to orthotics and prosthetics.

• (Leads to low utilization of rehabilitation services)

Average – 24% urban population –(Physical Rehabilitation) – 0% rural farming population –(Hindering factors -

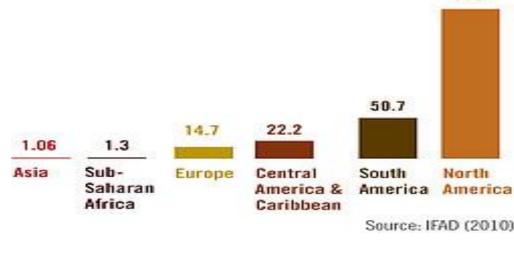
awareness and access)

Currently there are No Figures on the assistive technology demand in Africa nor data on State capacity to meet the demand

Rural Farmer Capacity to Pay For Rehabilitation Services and Devices

Profile of Africa Farm Size, Africa farmer and farm laborer

- Africa Agriculture-
- Farm size -5 acres (Small farm holders)
- Non mechanized
- Rain fed agriculture (Non-irrigated)
- No-Subsidizes



186

- Average farmer earnings in Africa \$535 per hectare per a Year
- (Yield, Production of maize grain per unit area (kg/ha) 2.5 tons per hectare)
- Average farm laborer earnings a day- \$1
- Smallholder *farms* in sub-Saharan *Africa number* around 33 million, and contribute up to 90% of food production in some sub-Saharan *African* countries

Demand of Assistive Technology devices in Africa

Taking the world estimate of 6% of every population in the developing world in need of a wheel chair lucks access to it, this means that Uganda may require as many as 1,500,000 wheelchairs to adequately meet the demand.

There is a lack of state funding, nationwide service delivery systems

• Resource allocation;

Health sector dependency on Grant Aid influences resource allocation

• Focus;

HIV, TB, hepatitis B- top infectious disease priorities in health and diagnostic services, HIV, TB and malaria is funded by the Global Fund to Fight AIDS, TB and Malaria, diagnostics for other diseases remain woefully underfunded

• The assistive products industry is currently limited and specialized, primarily serving high-income markets.

Funding for Rehabilitation and Assistive devices;

- Source of Assistive devices;
- Disability people's organization
- international agencies
- NGOs
- charity organizations
- Churches
- Government Psychical rehabilitation

• And greater financial resources for these donor are devoted to mobility devices (i.e., wheelchairs)-

A person with a mobility impairment is over six times more likely to have access to AT devices than a person with a non-mobility type of disability

Gaps in Rehabilitation in Africa

- Poor/limited data availability to accurately estimate the need of AT and current access to AT;
- Lack of a unified national strategy for Assistive Technology resulting in poorly defined roles among government entities and no coordination mechanism, and no programs and budget allocation for AT;
- Fragmented procurement with heavy reliance on contributions from donors, charities and non-governmental organizations;
- Lack of or weak standards and regulation for Assistive Technology products and service provision; and
- Insufficient workforce availability and capacity to provide Assistive Technology.
- Funding participation of people with disabilities might thus be considered to be more of a charitable or humanitarian response, rather than a development priority.
- Yet this thinking risks excluding 15% of the population

High Abandonment of AT Devices

• Luck of expert and recipient involvement the process;

No consideration of;

- 1. limitation needs
- 2. Environmental requirements

Trained health personnel essential for the proper prescription, fitting, user training, and follow-up of assistive products. Without these key steps, assistive products are often of no benefit or abandoned, and they may even cause;

Secondary injuries – No continuity of support

Also;

Luck of diagnostics or condition evaluation – Required to determine appropriate care and equipment

Focus- Health system on infectious conditions

In total, approximately 65,000 doctors and 70,000 nurses from sub-Saharan Africa, which is equal to approximately 28% of the region's medical workforce, are working internationally

Agrability in Africa

Advance -Community-Based Rehabilitation strategy- CBR, Shits interventions from institutions to the homes and communities of people with disabilities - cost-effective, and promote better social integration

Activities

- **Develop service capacity**-through educational activities
- Encourage networking- facility information sharing, access to funding, rehabilitation care and devices
- **Provide direct services** through individual assessment among other interventions

Other efforts;

• 1. Agrability -Low cost AT -Tool box-Public Access – Publically access able

AGRABILITY IN AFRICA

Ergonomically designed hand tool



Short hoe handle — Previously complained of back pain -musculoskeletal back disorders



Long handle - Reduced back pain after 5month of switching to the handle