

2024

Characterization of Disabilities Among Young Farmers in Uganda

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Recommended Citation

Agole, D., Baggett, C. D., Brennan, M. A., McKim, A. J., Crump, A., & Kule, E. B. (2024). Characterization of Disabilities Among Young Farmers in Uganda. *Journal of International Agricultural and Extension Education*, 31(2), 173-186. DOI: <https://doi.org/10.4148/2831-5960.1161>

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Abstract

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Keywords

Agriculture, disability, inclusive education, Uganda, young farmers

Funding Source

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Abstract

It is essential for Agricultural and Extension Educators to understand the challenges facing all the individuals they serve; therefore, this study examined the characteristics of young farmers with disabilities in Northern and Eastern Uganda. The objectives were to determine disability demographics and the relationship between major causes of disability by type and age. The study used a comparative- cross-sectional research design involving 388 young farmers with disabilities in Uganda. The sample selection strategies involved the use of a stratified, random and criterion purposive sampling techniques. Descriptive statistics and chi square tests were used in analysing data. The findings indicated many young farmers with disabilities are male, 20 to 29 years old, married, and attained a primary school education. Most households had at least one person with a disability. Many young farmers have an innate disability and experience moderate to severe limitations in daily life activities. Most disabilities were linked with loss of limbs among those aged 20 to 29 years. However, there were statistically significant associations between the types of disabilities among young farmers across the various age categories. Disability statistics could guide interventions for minimizing disability rates and provisions for assistive devices for individuals with disabilities.

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Introduction

Agricultural extension educators provide educational opportunities designed to meet the needs of a defined clientele. In some cases, the individuals served by agricultural extension educators are dissimilar from them in their challenges, needs, and circumstances. Eighty-six per cent of these diverse extension clientele do not participate in decision making, and 75% of them are unaware of how to engage in community development interventions that would benefit them (United Nations, 2023). Therefore, agricultural and extension educators must be aware of the diversity of individuals they work with. In this study, we focus on farmers living with disabilities in Uganda so that agricultural extension educators will be empowered to work with this underserved category of farmers. By providing critical insight into this population, we aim to equip agricultural extension educators with the ability to consider the backgrounds, challenges, and needs of farmers living with disabilities.

Studies on people living with disabilities have received increasing attention since 2000; though still limited compared to other disciplines. The increase in the number of people living with disabilities in the 1970's marked the beginning of disability studies as an academic discipline (Albert et al., 1993; Retief & Letsosa, 2018). This movement included the development of an analytical tool (social model) to apply in political campaigns. The social model approach emphasizes that disabilities are a social phenomenon preventing individuals' full participation in societies, and not just a physical functional limitation (Barnes & Oliver, 1995; Burton, 1993). Earlier researchers, such as Barton (1993), espoused the social model approach as an essential tool in making social services such as education and health disability-inclusive (Retief & Letsosa, 2018; Oliver & Barnes, 2010).

Categorization of disability tends to be based on physical or mental, temporary or permanent, and age at which disability manifests (e.g., old age disabilities). Physical disabilities impact walking or using hands and can include visual, hearing, and speaking abilities while mental disabilities impact the mind or cognitive abilities. The elderly with disabling ailments may be regarded as disabled due to their inability to cope with the physical demands of work and life, such as walking. Disabilities in physical, psychological, or cognitive abilities have been considered inevitable in old age (United Nations, 2023). Our research, however, focuses on physical and mental disabilities among young farmers of 16 to 45 years of age in Uganda.

Data and information on disability are limited globally, especially in the Global South - therefore numerical estimates often do not reflect the actual prevalence of such conditions and the related social impacts (Eide et al., 2021). About 12.5% of Uganda's population is estimated to have disabilities (Uganda Bureau of Statistics, 2018). There is a variation in the disability rates of regions of Uganda, with 14.5% in Northern, 14% in Eastern, 12.3 % in Western, and 9.8% in Central Uganda (Uganda Bureau of Statistics, 2020). Studies suggest that the demographics of people living with disabilities in Uganda include people who have a mobility impairment (29.5%), a visual impairment (28.5%), a hearing impairment (17.5%), and another type of impairment (24.5%) (Beisland & Mersland, 2014). The most common disabilities include loss and limited use of limbs and disabilities caused by injuries (Uganda Bureau of Statistics, 2018).

According to the Uganda Police Force annual crime and traffic reports for 2023, traffic accidents increased by 30 percent to 4,179 in 2023 from 3,210 in 2022, and thus constitute the leading cause of death and disability in Uganda. The overall traffic accidents in Uganda increased to 12,487 in 2023 from 8,860 in 2022. Similar reports by World Health Organization (2011) and Gukande et al. (2009) attribute acquired disability to road accidents. Automobile accidents are common in Uganda because of the poor state of roads characterized by being narrow, deficient of traffic signs, and are ridden with potholes (Independent, 2023). Specific

to agricultural producers, most farmers lack protective wear, thus, they are facing increased risk to injuries from farm implements, sharp objects, agrochemicals, and snakebites.

Northern Uganda experienced a protracted civil war between the Lord's Resistance Army (LRA) and the Government of the Republic of Uganda between 1986 and 2004. War has catastrophic effects on human physical, mental and emotional health, and the wellbeing of people and communities (Carter, 1997; Forge, 1997). The Northern and Eastern Uganda civil wars displaced people from their communities, and caused loss of life, injuries, and loss of livelihood (Beisland & Mersland, 2014). The political climate in Uganda has been characterized by civil conflict that lasted over 20 years, with after-war effects such as increased number of people with disabilities, land conflicts, diseases, and a breakdown of social services (education and health). Post-war disabilities and psychological trauma affect many (Grant, 1997). Globally, the effects of war are more pronounced on children and women, with one child in every 200 traumatized by war (Kadir et al., 2019).

Little is known or understood about farmers living with disabilities. Like other marginalized groups, people living with disabilities are rarely included in agricultural development and extension efforts, and instead people with disabilities receive charitable aid (Retief & Letsosa, 2018). However, when agricultural extension educators understand and design interventions based on the population, people living with disabilities can thrive (Coe, 2012). The first step is to understand them.

Purpose and Objectives

This study characterizes disability among young farmers in Uganda. More specifically, this study examines the 1) relationship between disability severity and geographical regions; 2) relationship between type and cause of disability; and 3) relationship between type of disability possessed and age of young farmers.

Theoretical Framework

Traditionally, disability is referred to as a limitation in participation in daily living, work, or leisure activities resulting from physical or mental health condition. The study of disability uses four models: (a) medical, (b) social, (c) charity, and (d) spiritual (United Nations, 2011, 2023). Social and medical models tend to dominate most disability studies and are discussed in more detail below (Retief & Letsosa, 2018; United Nations, 2023). The charity model considers people with disabilities as recipients of social and economic handouts. The spiritual model considers supernatural spirituality and religiosity as the best interventions for people with disabilities (Retief & Letsosa, 2018). It is important to note people with disabilities have turned to religion and spirituality because of social exclusion by communities and their failure to access therapy to their social and health challenges, as advocated by the spiritual model of disability (Retief & Letsosa, 2018).

The social model is mainly used in disability studies in the Global South; while researchers conducting disability studies in the Global North prefer the medical model (United Nations, 2016, 2023). In the medical model, disability is viewed as pathological – an individual affection that can be diagnosed and treated (Patel & Brown, 2017). The social model, used in this study, is the newest in disability studies. The social model became popular in response to the growing global Disability Rights Movement (United Nations, 2016). The social model breaks the causal link between impairment and disability. Much as the disability exists in an individual, the impacts of people's disabilities can be cultural, economic, and social (United Nations, 2016). The existence of a physical and/or mental disability does not constitute the primary cause of socio-economic disadvantages faced by people with disabilities. Instead, the

emphasis of the social model is on how society disadvantages people living with disabilities from accessing existing social and economic opportunities, rendering them dependent on other people for support services. The social model approach has been pivotal in the development of social policies that address the plight of people with disabilities. The United Nations popularized the social model by linking disability to human rights abuses, which culminated in the United Nations Convention on the Rights of People with Disabilities (CRPD) in 2008 (United Nations, 2011, 2016). Disability becomes a human rights violation when individuals are excluded from society via exclusion from education, health care, and social resources.

Based on the social model, disability refers to the social consequences of the possessed impairment attributed to inequities faced by people with disabilities due to community structure (United Nations Disability and Disaster Reduction, 2023). Therefore, in this study, disability refers to a complex system of restrictions and barriers imposed on people with physical and mental impairments that impede their ability to enjoy rights and other opportunities accessed by people without disabilities (Friesen et al., 2010; Siddiqua et al., 2012; Yeo, 2005).

Methodology

Research Design and Study Area

Uganda is comprised of four geographical and administrative regions: Northern, Eastern, Western, and Central (Uganda Bureau of Statistics, 2015). This study was completed in the Northern and Eastern regions as these regions have the highest disability and poverty rates in the country (Uganda Bureau of Statistics, 2018). Northern Uganda has a total population of 7,188,139 people and Eastern Uganda has 9,042,420 people (Uganda Bureau of Statistics, 2015). Given that reliable data on the percentage of people with disabilities in Uganda do not exist, it is difficult to obtain an accurate frame to base the study sample on.

The sample size of 388 farmers with disabilities between the ages of 16 and 45 years included 258 from Northern Uganda and 130 from Eastern Uganda. The difference between the number of participants selected from Eastern versus Northern Uganda is due to the ineffective disability structures which made it difficult to access same number of farmers across both regions.

The study used a mixture of three-stage stratified, simple random, and purposive criterion sampling techniques. In regards to the area sampling, we used a three-stage stratified sampling technique with the first stage as region, second stage as sub-region, and third stage as district. Criterion-based purposive selection was used in selecting the sub region of Acholi in the Northern region, and sub region Teso in Eastern Uganda, as these two regions have about 10% out of the 12.4% of the national disability rate (Bureau of Statistics, 2016). Additionally, Acholi and Teso sub regions had experienced over 20 years of protracted civil conflict between the Government of Uganda and the Lord's Resistance Army (LRA) between 1986 and 2004.

Once the districts were selected, individual young farmers in each district were randomly selected to give all young people living with disabilities an independent and equal opportunity to be selected to participate in the study (Dillman et al., 2014; Urdan, 2010). Thus, the unit of analysis for enumeration was the individual young farmer living with a disability.

Table 1*Sampling Scheme for 388 Young Farmers with Disabilities*

Stratified	Purposive	Random	Reason
Region	Northern	258	Have highest disability rates
	Eastern	130	
Sub region	Acholi	Gulu District 111 Nwoya District 70 Omoror District 52 Amuru District 20 Agago District 05	Protracted civil war was between 1986 and 2004
	Teso	Kumi District 103 Bukedea District 27	

Data Collection

Personnel at the National Union of Disabled Persons of Uganda (NUDIPU) acted as the point of entry to access young farmers living with disabilities because of their knowledge and experience as a disability organization working closely with disabled people. In line with Uganda's decentralized system of governance, NUDIPU has offices that span national and district levels, which brings services closer to the people to improve their participation in addressing development challenges.

The interviewer-administered paper survey was developed for collecting quantitative data from young farmers with or without disabilities. The interviewer-administered paper survey contained questions regarding the demographic conditions of the respondents and causes of disabilities. The questionnaire was reviewed for content validity by disability experts. In addition, the paper survey was pilot tested by administering it to 20 young farmers living with disabilities - the pilot test participants were not included in the actual study data. Cronbach's alpha was used for determining the internal consistency of the items, which were used in forming summated subscales.

The paper survey was administered by five research enumerators trained by the principal investigator in accordance with standards approved by the Institutional Research Board. Since most people living with disabilities experience difficulties in reading and writing due to no formal or lower levels of education attained, the questions were translated into Luo and Ateso dialects for comprehension. The research enumerators included social workers with disability organizations, youth with disabilities, and sign language interpreters for the benefit of young farmers with hearing and speaking disabilities. The data were collected in January 2017. The questionnaires were administered in the households of young farmers with disabilities in one sitting. Data were collected from young farmers with disabilities that are engaged in the agricultural sector. Young farmers living with disabilities were in the categories of speaking, hearing, walking, handling, visual and burns/deformities; mental disabilities; and albino and little people.

Data Analysis

Data for young farmers with disabilities in Northern and Eastern Uganda were separately collected and entered in SPSS as separate data files. After cleaning the data and checking for missing data patterns, if any, the two data sets were merged with identifier variables created regarding region. No personal identifiers (i.e., names, codes, etc.) were assigned to specific individuals in the data files. The study employed basic descriptive and Chi-square statistics to analyze data.

Results

The demographic characteristics of the respondents included gender, age, education, marital status, ethnicity, and religious affiliation. The demographics of young farmers with disabilities are categorized according to region of Uganda (Table 2).

Most young farmers with disabilities in the dataset are male (65.5%) and are between the ages of 20 and 29 years (41.5%) (Table 2). In addition, a majority of young farmers with disability have attained primary education (59.8%), with few completing university education (1%), and 10.6% having no formal education (Table 2).

In terms of the regional disability distribution, the sample included 60.1% Acholi people of Northern Uganda and 33.5% Iteso people of Eastern Uganda. The following sectors of faith dominate young farmers with disabilities: Catholic (61.3%), Anglican (25.5%), and Pentecostal faith (10.6%) (Table 1). The same trend of religious faith dominates young farmers without disabilities with Catholics (57.8%), Anglican (27.7%), and Pentecostal (10.1%) being most prominent (Table 2).

The researchers further examined the demographic characteristics of the young farmers with disabilities at household level, origin, causes of acquired disability, and the severity of the disability (see Table 3).

Table 2
Demographic Characteristics of Young Farmers with Disabilities

Demographic Characteristic	Young Farmers with Disabilities					
	Both Regions (N=388)		Eastern Uganda (N = 130)		Northern Uganda (N = 258)	
	N	%	N	%	N	%
Gender						
Male	254	65.5	96	24.7	158	40.7
Female	134	34.5	34	8.8	100	25.8
Age (years)						
Below 20	53	13.7	12	3.1	41	10.6
20 to 29	161	41.5	35	9.0	126	32.5
30 to 39	128	33.0	49	12.6	79	20.4
40 and Beyond	46	11.9	34	8.8	12	3.1
Highest Education Completed						
None/No Formal	41	10.6	15	3.9	26	6.7
Schooling						
Primary School	232	59.8	103	26.5	129	33.2
Secondary School	58	14.9	08	2.1	50	12.9
Tertiary Education	53	13.7	04	1.0	49	12.6
University Education	04	1.0	00	0.0	04	1.0

Marital status						
Married/Cohabiting	215	55.4	87	22.4	128	33.0
Never Married	153	39.4	38	9.8	115	29.6
Separated/Divorced	14	3.6	04	1.0	10	2.6
Widowed/Widower	06	1.5	01	0.3	05	1.3
Ethnicity						
Acholi	233	60.1	00	0.0	233	60.1
Iteso	130	33.5	130	33.5	00	0.0
Langi	21	5.4	00	0.0	21	5.4
Others (Madi, Karamojong)	04	1.0	00	0.0	04	0.1
Religious affiliation						
Catholic	238	61.3	65	16.8	173	44.6
Anglican/Protestant	99	25.5	45	11.6	54	13.9
Born Again/Pentecostal	41	10.6	14	3.6	27	7.0
Muslim	04	1.0	00	0.0	04	1.0
Others (traditionalist/pagan)	06	1.5	06	1.5	00	0.0

Table 3*Description of Disabilities for Young Farmers*

Disability Characteristic	Young Farmers with Disability					
	Both Regions (N=388)		Eastern Uganda (N=130)		Northern Uganda (N=258)	
	N	%	N	%	N	%
Origin of Disability						
Inborn	270	69.6	79	29.3	191	70.7
Chi square = 7.184 (p = 0.007); Cramer's V = 0.136						
Acquired in Lifetime	118	30.4	51	43.2	67	56.8
Cause of Acquired Disability						
Accidents	58	48.7	45	77.6	13	22.4
Gunshots/Land Mines/Civil Wars	21	17.6	00	0.0	21	100.0
Disease	22	18.5	02	9.1	20	90.9
Other Causes (snake bites/fire/acid burns)	18	15.2	04	22.2	14	77.8
Chi square = 57.687 (p = 0.000); Cramer's V = 0.696						
Severity of the Disability (N=235)						
Severe	40	34.2	09	22.5	31	77.5
Moderate	61	52.1	31	50.8	30	49.2
Mild	17	13.7	11	68.8	05	31.3
Chi square = 12.651 (p = 0.002); Cramer's V = 0.329						

Most young farmers have inborn disabilities (69.6%) and acquired disabilities (30.4%) in their lifetime. Most acquired disabilities are caused by accidents (48.7%), disease (18.5%), gunshots/civil wars (17.6%), other causes (snake bites/fire/acid burns/witchcraft) (15.2%). The

disabilities imposed are rated moderate (52.1%), severe (34.2%), and mild (13.7%) in terms of severity on the health and ability of young farmers to engage in productive activities in their communities (Table 3). In addition, most limb disabilities are inborn (25.8%) and acquired (19.1%) during a person's lifetime. Multiple body deformations are inborn (17.5%) and acquired (5.9%) (Table 4).

Furthermore, while most young farmers indicated that they have been born with disabilities (69.6%) and acquired disabilities (30.4%) in their lifetime, in-depth interviews revealed a new dimension (Table 3). During these interviews with key informants with disabilities, we learned that most respondents did not differentiate between the various forms of disability that are inborn with those acquired in their lifetime (Agole, 2021). For example, most respondents indicated polio, cleft feet, among others as inborn, yet such disabilities tend to be developed in early childhood. Further analysis of the cause of disabilities acquired in the young farmers' lifetime is summarized in Table 4. Furthermore, we examined type of disability by age, and the results are summarized in Table 5.

Table 4*Type of Disability by Cause*

Type of Disability (N=119)	Grouped Causes of Disability (N=119)							
	Accidents (N=58)		Gun shots/Civil Wars (N=21)		Disease (N=22)		Other Causes (N=18)	
	N	%	N	%	N	%	N	%
Limbs (N=61)	30	25.2	11	9.2	10	8.4	10	8.4
Deformed/ Burned body (N=29)	10	8.4	06	5.0	08	6.7	05	4.2
Hearing (N=11)	08	6.7	00	0.0	02	1.7	01	0.8
Visual (N=14)	08	6.7	04	3.4	00	0.0	02	1.7
Speaking (N=4)	02	1.7	00	0.0	02	1.7	00	0.0
Total Cause of Disability	58	48.7	21	17.6	22	18.5	18	15.1

Table 5*Type of Disability by Young Farmer's Age*

Region of Uganda	Type of Disability	Age (years) of Young Farmer							
		Below 20 (N=97)		20 – 29 (N=14)		30-39 (N=2)		40 and Beyond (N=1)	
		N	%	N	%	N	%	N	%
Both Regions (N=388)	Limbs (N=174)	24	6.2	78	20.1	53	13.7	19	4.9
	Deformed/Burned Body (N=91)	13	3.4	36	9.3	36	9.3	06	1.5
	Hearing (N=62)	12	3.1	22	5.7	18	4.6	10	2.6
	Visual (N=41)	03	0.8	17	4.4	14	3.6	07	1.8
	Speaking (N=15)	01	0.3	08	2.1	02	0.5	04	1.0
	Mental (N=5)	00	0.0	00	0.0	05	1.3	00	0.0

Chi square = 25.518 (p = 0.043); Cramer's V = 0.148									
Eastern (N = 130)	Limbs (N=66)	06	4.6	19	14.6	28	21.5	13	10.0
	Deformed/Burned Body (N=11)	02	1.5	01	0.8	05	3.8	03	2.3
	Hearing (N=20)	02	1.5	04	3.1	06	4.6	08	6.2
	Visual (N=22)	02	1.5	07	5.4	07	5.4	06	4.6
	Speaking (N=9)	00	0.0	04	3.1	01	0.8	04	3.1
	Mental (N=2)	00	0.0	00	0.0	02	1.5	00	0.0
Chi square = 14.524 (p = 0.486); Cramer's V = 0.193									
Northern (N = 258)	Limbs (N=108)	18	7.0	59	22.9	25	9.7	06	2.3
	Deformed/Burned Body (N=80)	11	4.3	35	13.6	31	12.0	03	1.2
	Hearing (N=42)	10	3.9	18	7.0	12	4.7	02	0.8
	Visual (N=19)	01	0.4	10	3.9	07	2.7	01	0.4
	Speaking (N=6)	01	0.4	04	1.6	01	0.4	00	0.0
	Mental (N=3)	00	0.0	00	0.0	03	1.2	00	0.0
Chi square = 16.999 (p = 0.319); Cramer's V = 0.148									

Most disabilities associated with limbs (20.1%), burns (9.3%), hearing (5.7%), and visual (4.4%) tend to be developed by young farmers at the age of 20 to 29 years (Table 4). The Chi square = 25.518 (p=0.043) indicates that there is a significant association between the type of disabilities amongst young farmers across the various age categories.

Lastly, we considered the cause of disability by age of young farmers as presented in Table 6.

Table 6
Cause of Disability Possessed by Young Farmers by Age

Region of Uganda	Cause of Disability	Age (years) of Acquisition of Disability							
		Below 20 (N=97)		20 – 29 (N=14)		30-39 (N=2)		40 and Beyond (N=1)	
		N	%	N	%	N	%	N	%
Both Regions (N=114)	Accident (N=58)	55	48.2	03	2.6	00	0.0	00	0.0
	Gunshot/Civil Wars (N=20)	14	12.3	05	4.4	00	0.0	01	0.9
	Disease (N=20)	15	13.2	04	3.5	01	0.9	00	0.0
	Other Causes (burns/witchcraft/snake bites) (N=16)	13	11.4	02	1.8	01	0.9	00	0.0
		Chi square = 16.553 (p = 0.056); Cramer's V = 0.220							
Eastern (N=51)	Accident (N=45)	43	84.3	02	3.9	00	0.0	00	0.0
	Gunshot/Civil Wars (N=0)								
	Disease (N=2)	02	3.9	00	0.0	00	0.0	00	0.0

	Other Causes (burns/witch craft/snake bites) (N=4)	04	7.8	00	0.0	00	0.0	00	0.0
Chi square = 0.278 (p = 0.870); Cramer's V = 0.074									
Northern (N=63)	Accident (N=13)	12	19.0	01	1.6	00	0.0	00	0.0
	Gunshot/Civil Wars (N=20)	14	22.2	05	7.9	00	0.0	01	1.6
	Disease (N=18)	13	20.6	04	6.3	01	1.6	00	0.0
	Other Causes (burns/witch craft (N=12)	09	14.3	02	3.2	01	1.6	00	0.0
Chi square = 6.491 (p = 0.690); Cramer's V = 0.185									

Most disabilities among young farmers below 29 years are caused by accidents (50.8%), gunshot/civil wars (16.7%), diseases (16.7%) and other causes (13.3%) (Table 6). In addition, the Chi-square value of 16.553 (p=0.056) imply that there are no significant associations between the causes of disability amongst young farmers across the various age categories in which a disability was acquired.

Discussion and Implications

The greater percentage of males compared to females with disabilities can be explained by a common practice in Uganda: greater male mobility from households and local villages to participate in socioeconomic activities that can improve household welfare. The low level of formal education amongst young farmers with disabilities is largely due to their exclusion from socio-economic opportunities that would empower them like formal education and employment. The social exclusion of young farmers with disabilities is due in part to the very low value attached by families and communities to a person with a disability—in other words; these individuals may be viewed as a burden with less or low value to family and community development (Eide et al., 2021). Faced with this challenge, young farmers with disabilities tend to marry at an early age and most marry others with similar disabilities to foster close interactions among people with similar conditions due to social exclusion from the wider community (Eide et al., 2021).

Limb-related (legs and hands) disability tends to be more prevalent because Ugandans are more susceptible to traffic injuries. Road accidents are common, especially due to the poor state of roads, and high number of commuter motorcycles and passenger service vehicles which serve as the primary means of transport in Uganda. In addition, young farmers lack protective wear for production agriculture work, exposing themselves to the risk of injuries from farm implements, sharp objects, agrochemicals, and snakebites.

According to reports from the Uganda Police Force (2023), and Uganda Bureau of Statistics (2018), as well as those offered in Independent Magazine (2023), accidents are the leading cause of death and disability in Uganda. Many young farmers with disabilities experience moderate to severe conditions, an indication of a need for broad interventions that enable them to improve their participation in capacity building and well-being programs.

Multiple body deformations are primarily due to road injuries, acid and fire burns, or deliberate mutilation by assailants. Another reason for the high percentage of multiple body deformations in Northern and Eastern Uganda is the civil wars between 1986 and 2004, where an undocumented number of people suffered physical mutilations. In addition to rampant road accidents, disabilities have been increased by limited access to and overall poor healthcare

services. Maternal and child health care units are especially difficult to access and lack sophisticated services which increases the severity of disabilities that otherwise could have been better treated or even preventable. The type of disabilities lived by young farmers varies across age categories. Youth represents a development stage in which the body experiences many rapid changes that most find difficult to cope with. At the youthful stage, young peoples' adventurous tendencies put them at higher risk of accidents.

Conclusion

There is a strong need for the Ugandan government and transport agencies within the country to revise existing transport policies or develop policies that regulate commercial passenger service automobiles including commuter motorcycles, taxis, buses, and all road users. This would dramatically decrease the occurrence and severity of road accidents, which rank first on the list of disability causes in Uganda. In addition, the prevalence of disability amongst young farmers, ages 30 to 39 years old, in Eastern Uganda, and 20 to 29 years old in Northern Uganda, demands education and sensitization of youth. Having an intentional focus on the youth is critical as this is Uganda's largest demographic to participate in commuter motorcycle rides. Furthermore, there is need to develop and enforce policies that regulate boda-boda (local motorcycle) services on roads to protect and safeguard young people on Ugandan roads, which would also reduce strain on health care services. As most people with disabilities move with difficulties, such policies prevent the occurrence of secondary disabilities. Moreover, there is need for concerted effort from youth and adult leaders from various community levels and the general public to promote and enforce disability policies and road transport regulation policies targeting road users.

Given that most young farmers possess disabilities representing a moderate to severe condition, this research emphasizes the need for interventions that address both social and medical conditions faced by young farmers with disabilities. Disability issues should be mainstreamed in curricula for training in all levels of education in attempt to not only prevent disability occurrence, but to also create disability-inclusive and supportive environments for those living with such conditions.

Agricultural extension educators have an opportunity with these data to design educational opportunities for people with disabilities in Uganda. They can work with farmers with disabilities to design tools or modify equipment that can be used by farmers who are missing limbs, for example. In addition, knowing that most of the existing disabilities were caused by accidents presents an opportunity to teach farm safety to all farmers and children.

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