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MINING SECTOR REFORMS IN THE CONTEXT OF FIFTY YEARS OF INDEPENDENCE IN TANZANIA: A REFLECTION OF MWALIMU NYERERE'S LEGACY *(MIKIDADI I. MUHANGA & JUSTIN K. URASSA)*

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CHALLENGES OF CHILDREN WITH DISABILITIES IN ACCESS TO EDUCATION: A CASE STUDY OF SELECTED PRIMARY SCHOOLS IN DAR ES SALAAM, TANZANIA *(SARAH E. MWAKYAMBIKI)*

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EDITORIAL

Welcome to this edition of the Journal of Co-operative and Business Studies (JCBS). JCBS aims at offering an avenue for co-operative and business papers that extend knowledge to both the academicians and practitioners. We publish papers that enable readers to have a thoughtful approach towards specific aspects of co-operation and business at large that authors put forward. We continue to aspire for better managed co-operatives that are rooted and are designed and managed for the betterment of their members' livelihood and the community in which they are based. We have a vision of businesses that not only enrich owners but are conscious of the environment and people affected by their operations but also take appropriate action to ensure current and future generations continue to benefit from their undertakings.

JCBS thus envisions a better and inclusive future for all. Co-operatives are after all about inclusiveness and networking. They reinforce each other and that is why this issue of JCBS takes cognizance of the role of co-operatives in wealth creation through savings and lending, vegetables and market governance, education and how it can be delivered to impact performance which finally leads to socio-economic growth. The papers extol beliefs and findings from the community mostly in Tanzania. In this issue, we present ten peer reviewed papers.

Enjoy reading!

Dr. Gervas M. Machimu
Chief Editor

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COMMUNITY MEMBERS' INTERACTION WITH HEALTH PROFESSIONALS AND HEALTH LITERACY UNDER ONE HEALTH APPROACH IN SELECTED WARDS IN TANZANIA: THE NEXUS

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ABSTRACT

Health care providers are a community's trusted source of health information and can impact on health literacy. However, their effectiveness depends very much on how health care providers recognize and respond to patients' information and communication needs. This article from a cross-sectional study discusses the influence of the community members' interaction with health professionals (CMIWHP) on health literacy (HL) under One Health Approach in selected wards in Morogoro, Tanzania. It specifically:- (i) assessed HL of the people in the study area, (ii) assessed CMIWHP, and; (iii) assessed the association/linkages (nexus) between CMIWHP and HL levels. Data was collected using a structured questionnaire administered through a Computer Assisted Personal Interviewing (CAPI) electronic platform from 1440 respondents obtained through multistage sampling procedure, 80 focus group discussions' participants and 16 key informant interviewees. Indexes of score were constructed to measure CMIWHP and HL respectively. A chi-square test of independence was used to establish the association/linkages (nexus) between CMIWHP and HL. IBM-SPSS v.20 analysed quantitative data while qualitative data were organized into themes on specific objectives to back up findings. The study revealed, about one third of the respondents (32.9%) with adequate HL, moderate HL (30.8%) and majority with inadequate HL (36.3%). The results further indicate that only 17.5% (95% CI:15.0 to 19.9) had high CMIWHP, 42.5% (95% CI:39.5 to 45.9) with medium CMIWHP and the majority 40.0% (95% CI:37.2 to 43.1) had low CMIWHP. Chi-square results indicate a significant association between CMIWHP and HL, $\chi^2(2)=168.593$, $p=.000$, $\phi=.342$ It is concluded that CMIWHP significantly associates/links to HL levels, but with a medium effect. It is recommended that effective interventions should be established to enable further health care providers recognition and responses to patients' information and communication needs.

Keywords: patients-providers interaction, health literacy, patient-centered care, Tanzania

1.0 INTRODUCTION

Undeniably, what people interact with everyday has always been found to shape the ideas about health and behaviours, this has included, the communication, information, and technology that people interact with (Margalit *et al.*, 2006; Aceto *et al.*, 2018). It remains uncontested that health communication, information and technology are essential to health care, public health, and the way our society views health (DHHS-US, *n.d.*; Epstein *et al.*, 1993; Assis-Hassid *et al.*, 2013; Aceto *et al.*, 2018). It is against this background that the Ministry of Health and Social Welfare (MoHSW) in Tanzania recognizes the potential of information and communication technology (ICT) to transform healthcare delivery by enabling information access and supporting healthcare operations, management, and decision making (Darcy *et al.*, 2014:36). Obviously, it is through these interactions that the context and the ways professionals and the public search for, understand, and use health information, significantly impacting their health decisions and actions.

Among these interactions, community members' interaction with health professionals (CMIWHP) has been considered as a communication route and source of information which has influence on HL and consequently into health outcomes (Epstein *et al.*, 1993; Assis-Hassid *et al.*, 2013;URT, 2017; Muhanga, 2018a). Obviously, HL can significantly contribute towards attaining good health particularly when taken into the context of the interface of humans, animals and the environment. This is recognizing the fact that there exists an inextricable link between human, animal and environmental health, hence it is imperative for veterinarians, human health and professionals in some other related sectors to collaborate closely at the same time a high level of HL under One Health Approach encouraged among people towards maintaining good health (Muhanga and Malungo, 2018b).

It is worth noting that health professionals, healthcare providers, and the health system have a major role in assisting people to build knowledge and skills about their health (Mboera *et al.*, 2007; Lambert *et al.*, 2014). Due to that, health professionals and health facilities, among others, have been identified as major stakeholders in HL (Mitic and Rootman, 2012); much as health care providers are a community's trusted sources of health information and definitely have impacts on health literacy and consequently on health (Beck *et al.*, 2002). Definitely, patients and general community encounters with health professionals and systems have always been expected to result into improving health literacy knowledge and skills through the support of health professionals (Nielsen-Bohlman, *et al.*, 2004; Easton *et al.*, 2010). Incognizant of the roles that health professionals, healthcare providers, and the health system have in building knowledge and skills about health; the provision of health care in a way that patients are empowered to understand and act upon crucial health information when making healthcare decisions has gained importance (Frankel *et al.*, 2005; Stein *et al.*, 2005; Altin and Stock, 2016).

However, effectiveness of this depends very much on how health care providers recognize and respond to patients' information and communication needs.

Despite the potentiality of CMIWHP to serve as health information source, innumerable barriers to CMIWHP effectiveness to better serve patients and general public eventually to improve their HL exist (Barry *et al.*, 2000; Cegala *et al.*, 2000; URT-MoHSW, 2009; Muhanga, 2018). These barriers include; healthcare professionals use of language of their discipline, increasing complexity in terms of navigating healthcare systems; health professionals' limited understanding of HL resulting into health professionals' inability to improve their patients' health literacy skills hence limiting patients' capacity to improve understanding of their illness and instructions on how to manage their health conditions (Rudd and Anderson, 2006; Lambert *et al.*, 2014). An observation made by Nutbeam (2018:4) is that sometimes patients find it very difficult to interact "with a person (like a doctor) whom they find unfamiliar and intimidating". Other barriers are related to language and communication which are reported to result in impaired communication with medical providers (Williams *et al.*, 1995; Davis *et al.*, 2002). Studies (Stewart, 1995; Williams *et al.*, 1998; Makoul and Clayman, 2006; Street *et al.*, 2009) identify quality of communication between health professionals and patients as another barrier. Additionally, unfriendly services (URT, 2007: ix) is identified as another barrier, resulting from health workers abuse of professional code of ethics and conduct which has sometimes been reflected on usage of bad language to patients (URT, 2017:17).

In the view of the identified barriers and challenges, there has sometimes been a difficulty for the CMIWHP to realize what has been expected, that is to provide substantial health information that can improve health literacy knowledge and skills through the support of health professionals. To address this situation countless efforts have been institutionalized (Booth *et al.*, 2004; Stein *et al.*, 2005; Reis *et al.*, 2011; Darcy *et al.*, 2014; URT-MoHSW, 2007; URT, 2017). *Inter alia*; these efforts included; transforming healthcare organizations to health literacy responsive organizations through redesigning their structures and processes in support of low literate patients to navigate, understand, and use information and services for taking care of their health (Paasche-Orlow *et al.*, 2006, Brach *et al.*, 2012). This transformation encourages health care organizations to implement elements of patient-centred care. Patient centred care is literally "care that is respectful of and responsive to individual patient preferences, needs, and values" and that ensures "that patient values guide all clinical decisions" (IOM, 2001:3). Practically, the implementation of elements of patient-centred necessitates health care organizations plus its staff to shift their total focus from disease oriented care but also involve in a close patient-physician partnership for the sake of producing the best possible outcome for the patient (Barry and Edgman-Levitan, 2012). The government of Tanzania embarked into a number of initiatives which among others focusing on information, education and communication; aiming at empowering the community for health improvement (URT, 2007:52). These initiatives are also underlined in subsection 3.3.3 of the 2003 National Health Policy which states: "To ensure quality and

effective health communication, the Ministry shall continue to provide guidelines and procedures for the provision and delivery of health education and IEC interventions at all levels” (URT, 2003:9). Along with that the government of Tanzania also strengthened active community partnership through intensified interactions with the population for improvement of health and social wellbeing (URT, 2017: 3)

The initiatives which were devised to address barriers and challenges towards quality and effective health communication theoretically are intending to empower patients to take care of their health and to support patients to navigate, understand, and use health information and services (Altin and Stock, 2016:7). Contemporarily, there is scanty existing empirical evidence on the extent to which CMIWHP based on patient-provider communication has been enhanced and how it has resulted into greater patients’ empowerment to navigate, understand, and use health information and services in Tanzania. It is not empirically known however to which extent such contacts (interactions) have managed to influence information exchange and hence impacting on HL. It is in this light that this article analyses the nexus that exists between CMIWHP and HL following the efforts to address challenges and barriers to CMIWHP effectiveness to better serve patients and general public eventually to improve their HL in the context of OHEA in selected wards in Morogoro, Tanzania.

2.0 MATERIALS AND METHODS

This paper results out of a cross sectional study conducted in the districts namely Morogoro municipality and Mvomero both located in Morogoro region in Tanzania. According to Tanzania-NBS (2013) the population of Morogoro municipality and Mvomero districts are reported to stand at 315,866 and 312,109 people respectively. The National One Health Strategic Plan 2015 – 2020 locates Morogoro under potential routes of risks exposure due to identification of some incidences of zoonotic diseases in the area (URT-PMO, 2015:16). The choice of Morogoro urban and Mvomero districts in Morogoro region in Tanzania for the study is justified on the ground that there has been numerous incidences of interactions of humans and animals which have been reported in the area. This area is a home to a pastoral community of Maasai origin; as well bordered by the Mikumi National Park, hence higher level of interaction between human and animals which is likely to lead to higher risk due to possibility of prevalence of certain health behaviours. Studies (Karimuribo, *et al.*, 2005; Mgone *et al.*, 2014) have also identified health risks presence in the area. This area is also occupied by inhabitants of very diverse socio-cultural and economic backgrounds hence providing a very good opportunity to conduct a study of this nature where a phenomenon under study requires comparison. Presence of Medical and veterinary staff at these two districts presents an opportunity of interaction to resolve issues under OHEA.

Using a cross-sectional research design both qualitative and quantitative data were collected. The choice of this design is based on being economical in terms of time, financial resources and nature of the study objectives (Kothari, 2004). A structured

questionnaire guide using a Computer Assisted Personal Interviewing (CAPI) electronic platform was used for data collection. This study employed multi stage sampling procedure, which comprised of four stages (in choosing districts, wards, villages/streets, and HHs) which enabled one thousand four hundred and forty respondents to be obtained from four purposively selected wards, the next stage two villages/streets from four wards were chosen and finally respondents were selected through simple random sampling from each village/street where animal keeping and related activities plus evidence of selling livestock products are found. The local leaders were involved in preparing sampling frame. IBM-SPSS v20 and Gretl software were used for the purposes of computing frequencies, percentages, chi-square, mean and maximum scores.

For sample size estimation, a 95% confidence interval (CI), a margin of error of 5%, and a design effect of 1.5 were assumed. Design effect was used since the multistage sampling method was employed. A minimum adequate sample size was calculated based on the statistical estimation method of Kelsey et al. (1996). A sample size of 1440 respondents was determined by using the formulae:-

$$s = X^2 NP (1 - P) \div d^2 (N - 1) + X^2 P (1 - P).$$

Where:-

s = required sample size.

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N = the population size.

P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

d = the degree of accuracy expressed as a proportion (.05).

Sample size for this study was calculated from the total population of each 2 purposive selected streets/ villages from a ward. After obtaining total sample for each ward, proportions of each streets/villages from the total sample was calculated. The sample size was then distributed in the identified study streets/ villages. The sample size allocated for each village/ street was considered adequate, since Bailey (1994) and Field (2009) claim that a sub sample of 30 respondents being the bare minimum for studies in which statistical data analysis is to be done regardless of the population size.

2.1 Measurement of Variables

2.1.1 Measurement of Community Members' Interaction with Professionals (CMIWHP)

To measure the interaction of respondents with professionals (medical, veterinary and environmentalists) on health and related matters, respondents were asked if they had communicated with these professionals in the past three (3) months and if they had visited or been visited by any of these professionals. A total of 6 questions were asked, three (3) each for communication and visiting aspects respectively. Respondents were required to respond "No" if they had not communicated with professionals and if they had not visited

or been visited and ‘Yes’ responses if they had communicated with professionals and if they had visited or been visited. All “No” responses were coded as 0 and “Yes” responses were coded as 1. The responses were transformed to 1 and 2 for No and Yes responses respectively for the purposes of computing the scores to indicate the level of community members’ interaction with professionals. A total score was computed from the six (6) asked questions.

$$\text{CMIWHP (3.00-6.00)} = Q1 + Q2 + Q3 + Q4 + Q5 + Q6$$

CMIWHP was then categorized into levels; namely: - High level of CMIWHP, (scores above 5.0), Medium level of CMIWHP (scores between 4.0 and 5.0) and Low level of CMIWHP (scores below 4.0).

2.1.2 Measurement of Health Literacy

For the purposes of measuring HL, methodological aspects from European HL Survey were adapted in this study (HLS-EU, 2012:4). To be able to measure HL, respondents were then asked: On a scale from very easy to very difficult, how easy would you say it is to: i.e., (Find information on treatments of illnesses that concern you). The questions comprised of items which reflected three health pertinent areas (health care, disease prevention, health promotion) and four information processing stages (access, understand, appraise, apply) in connection with health relevant decision-making and tasks on health and other closely related aspects under the interface of humans, animals and the environment. Using items related to health related areas and information processing stages a context specific HL assessment framework for assessing HL under OHEA was developed. It is a matrix measuring the perceived difficulty of performing a selected one health relevant tasks based on a four-point self-report scale (very easy, easy, difficult, and very difficult). The way a respondent will find it easy or difficult to undertake a certain task reflects an individual’s HL level under OHEA. To measure HL an index of score was created by allocating four points to every “very easy” response, three points to “easy” response, two points to “difficult” response, and one point to “very difficult” response. For the purposes of categorizing health literacy, scores were cut into three equal groups using SPSS Scores and classified into Inadequate Health Literacy (IHL), Marginal Health Literacy (MHL) and Adequate Health Literacy (AHL). A study by Gazmararian *et al.*, (2003) has also used a similar categorization.

2.1.3 Results and Discussion Socio-Demographic Characteristics of the Respondents

Socio-demographic characteristics of the respondents are very important variables in most social studies (Kaale and Muhanga, 2017; Muhanga and Malungo, 2017a; Muhanga, 2017b). Incognizant of that information on some socio-demographic characteristics namely age, sex, education level, marital status and household size were obtained. The summary on the socio-demographic characteristics of the respondents is provided in Table 1.

The results reveal that majority 29.2% (95% CI: 23.3 to 35.0) of the interviewed respondents were aged between were between 30 to 39 and 3.8% (95% CI: 1.7 to 6.2) were above 70 years. The average age was 43.7 years (95% CI: 43.1 to 44.4 years), and the highest age and the lowest age were 21 and 72 respectively. The majority 52.1 % (95% CI: 49.6 to 54.7) of the respondents interviewed were women. Slightly more than one-third (39.2%; 95% CI: 36.6 to 41.7) of the respondents had not gone to school at all. Of the

interviewed respondents, about 57.5% (95% CI: 50.9 to 63.8) of the respondents were married. In terms of household size (total number of household members) the average household size was 5 (95% CI: 5.08 to 5.28) members, lowest household size (minimum) had 1 member and the highest household size (maximum) with 10 members. About 62.9% of the interviewed households had 1 to 5 members.

Table 1: Socio-Demographic Characteristics of the Respondents (n=1440)

Variable	Categories	Percentage
Age in Years	21-39	42.1
	40-49	26.3
	50-59	17.1
	60-69	10.7
	> 70	3.8
Level of Education	Not gone to school at all	39.2
	Universal adult education	2.5
	Primary school	30.0
	Secondary school	8.8
	Post-secondary /vocational	10.4
	University	9.2
Sex	Male	47.9
	Female	52.1
Marital Status	Never married/Single Married	30.4
	Separated	57.5
	Widow	1.7
	Widower	5.4
	Cohabiting	2.5
	Too young to marry	0.8
		1.7
Household Size	1-3	21.7
	4-7	65.9
	> 8	12.4

2.1.4 Health literacy under the Humans, Animals and the Environment Interface

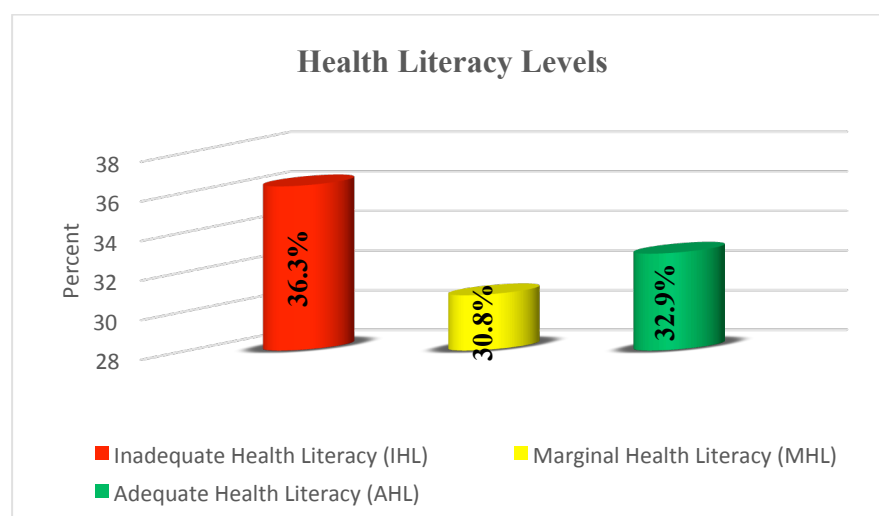
HL under the humans, animals and the environment interface at the household level was measured by using a context specific HL assessment tool. The results indicate that the mean score was 261.9 (95% CI: 257.6 to 266.4) while maximum and minimum scores were 141.0 and 501.0 respectively with a Std. deviation of 85.0 (95% CI: 81.4 to 88.3). Table 2 and Fig. 1 present HL results into categories, the results indicate that 36.3% (95% CI: 33.7 to 38.9) of the respondents had IHL, while 30.8 % (95% CI: 28.4 to 33.3) with MHL and 32.9% (95% CI: 30.3 to 35.3) had AHL.

Table 2: Health Literacy categories (n=1440)

Health Literacy Categories	Frequency	Percent	95% Confidence Interval	
			Lower Bound	Upper Bound
Inadequate Health Literacy (IHL)	522	36.3	33.7	38.9
Marginal Health Literacy (MHL)	444	30.8	28.4	33.3
Adequate Health Literacy (AHL)	474	32.9	30.3	35.3
Total	1440	100.0		

The findings from this study are similar to those from other studies conducted in various parts of the world. The trend indicates that IHL, low and limited HL is reported to be a common occurrence throughout the world even in economically advanced countries with strong education systems (Gazmararian, *et al.*, 1999b; IOM, 2004; Kutner, *et al.* 2006; HLS-EU CONSORTIUM, 2012; WHO, 2013; Sørensen *et al.*, 2015; Sørensen *et al.*, 2015). Low HL may well be more prevalent in many low and middle income countries as it has been observed in this study, though the situation is reported to be worse in the developing part of the world (Muhanga and Malungo, 2018a). This implies that lack of skills needed to manage health and prevent disease appears regardless of a country's level of development. Undeniably, to quote CDC¹ there are significant proportions of people among even within “those who read well and are comfortable using numbers, who are still facing HL issues much as they aren’t familiar with medical terms or how their bodies work.” Such individuals have problems with interpreting statistics and evaluating risks and benefits that affect their health and safety.

Fig.1 presents further HL levels in the study area whereby it can be observed that the majority of the respondents are found under IHL (36.3%) and only 32.9% are under AHL.

**Fig. 1 Health Literacy levels**

¹ Understanding Health Literacy: <https://www.cdc.gov/healthliteracy/learn/Understanding.html>

The existence of low, problematic and inadequate HL was found to be attributed to a number of facts as it was revealed in FGDs in this study. In a FGD at Mazimbu Ward; one male participant claimed that:

“.....Health related information has been very inadequateeven when it is available such information has been presented in a language which is difficult for us lay people to understand....”

This claim from the FGDs is similar to what has been observed by Mboera *et al.*, (2007) during their survey, which among others, they observed that despite health care facilities being found to be the best place for rural Tanzanian individuals to receive health information, it was witnessed that some of the brochures and posters that were prepared to provide health related information did not apply to health risks of the respective local community and were not at some points available for distribution to individual patients. Unavailability points out to issues of inadequacy of such health promotion materials. This is an indication that sometimes have been hindered by the failure to contextualize HL as it has been seen that information provided did not apply to health risks of the respective local community. If brochures and posters found at a health care facility did not apply to health risks of the local community, this has a very negative consequence on the effectiveness of such efforts in educating people to become health literate. Indubitably, HL is context specific, i.e. its function, acquisition and application should be in the light of distinct contextual conditions (Nutbeam, 2000; Kickbusch and Maag, 2006; Pleasant and Kuruvilla, 2008; Freedman *et al.*, 2009). This implies that failure to contextualize HL could also contribute to ineffectiveness of such efforts to educate people to become health literate.

2.1.5 Community Members' Interaction with Professionals (CMIWHP)

Table 3 shows that the minimum and maximum scores on CMIWP were 3.00 and 6.00 respectively with mean score being 4.7 (95% CI: 4.65 % to 4.76%) with Std. Deviation of 0.84 (95% CI: 0.8% to 0.9%).

Table 3: Scores on Interactions with Professionals on Health Matters (n=1440)				
Scores	Frequency	Percent	95% Confidence Interval	
			Lower Bound	Upper Bound
3.00	102	7.1	5.6	8.6
4.00	474	32.9	29.9	35.8
5.00	612	42.5	39.4	45.6
6.00	252	17.5	15.2	20.1
Total	1440	100.0	100.0	100.0

The results further indicate that only 17.5% (95% CI: 15.0 to 19.9) were in High level of CMIWP, while 42.5% (95% CI: 39.5 to 45.9) on Medium level CMIWP and 40.0% (95% CI: 37.2 to 43.1) on Low level of CMIWP. The categories of CMIWP are presented in Table 4 and Fig.2.

Table 4: Levels of Interactions with Professionals on Health Matters (n=1440)

	Frequency	Percent	95% Confidence Interval	
			Lower Bound	Upper Bound
Low CMIWP	576	40.0	37.2	43.1
Medium CMIWP	612	42.5	39.5	45.9
High CMIWP	252	17.5	15.0	19.9
Total	1440	100.0	100.0	100.0

The CMIWHP is further indicated in Fig. 2 whereby it can be seen that the high CMIWHP is occupying a small share of the pie (17.5%) only against the rest of the categories.

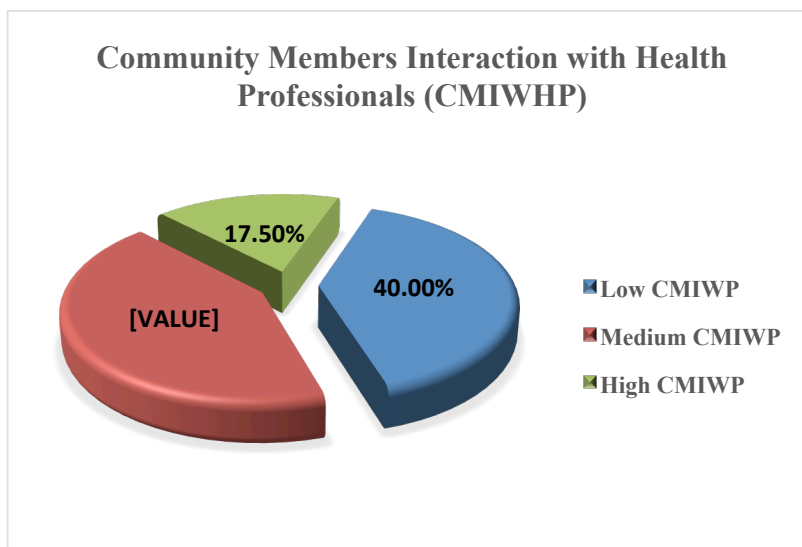


Fig. 2: Categories of Community Members Interaction with Health Professionals

The results in Table 5 show that majority of the respondents (47.9%) who had low CMIWHP were found under the IHL category, while 27.1% on MHL and only 25.0% had AHL. Table 5 further shows that majority of the respondents (54.8%) who had high CMIWHP were found under the IHL category, while 16.7% on MHL and only 28.6% had AHL.

Table 5: CMIWPH categories * Health Literacy Levels Cross tabulation (n=1440)

		Health Literacy Levels			Total
		IHL	MHL	AHL	
Low CMIWHP	Count	276	156	144	576
	% within Categories of CMIWHP	47.9%	27.1%	25.0%	100.0%
	% within HL levels	52.9%	35.1%	30.4%	40.0%
	% of Total	19.2%	10.8%	10.0%	40.0%
Medium CMIWP	Count	108	246	258	612
	% within Categories of CMIWHP	17.6%	40.2%	42.2%	100.0%
	% within HL Levels	20.7%	55.4%	54.4%	42.5%
	% of Total	7.5%	17.1%	17.9%	42.5%
High CMIWP	Count	138	42	72	252
	% within Categories of CMIWHP	54.8%	16.7%	28.6%	100.0%
	% within HL Levels	26.4%	9.5%	15.2%	17.5%
	% of Total	9.6%	2.9%	5.0%	17.5%
Total	Count	522	444	474	1440
	% within Categories of CMIWHP	36.2%	30.8%	32.9%	100.0%
	% within HL Levels	100.0%	100.0%	100.0%	100.0%
	% of Total	36.2%	30.8%	32.9%	100.0%

The results for the Chi-square tests for the association of CMIWHP and HL level are presented in Table 6. The results from the Chi-Square Tests of independence indicate that $\chi^2(2) = 168.593, p = .000$. This is an indication that there is statistically significant association between CMIWHP and HL level.

Table 6: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	168.593 ^a	4	.000
Likelihood Ratio	178.776	4	.000
Linear-by-Linear Association	5.839	1	.016
N of Valid Cases	1440		

A chi-square test of independence indicated significant association between HCSB and HL levels $\chi^2(4, n=1440) = 168.593, p=.000, \phi=.342$. The phi coefficient in this study is .342 based on Cohen's 1988 criteria of .10 for small effect, .30 for medium effect and .50 for large effect the strength of association between the variables is medium. The details are presented in Table 7.

Table 7: Bootstrap for Symmetric Measures

		Value	Bootstrap ^a			
			Bias	Std. Error	95% Confidence Interval	
					Lower	Upper
Nominal by Nominal	Phi	.342	.002	.023	.300	.390
	Cramer's V	.242	.002	.016	.212	.276
N of Valid Cases		1440	0	0	1440	1440

a. Unless otherwise noted, bootstrap results are based on 1440 bootstrap samples

It can be noted from Table 5 that CMIWHP has not been very effective to influence information exchange and hence impacting on HL. It is obvious from Table 5 that the nexus between CMIWHP and HL can only be observed for Low CMIWHP and IHL also for Medium CMIWHP and MHL only but not for High CMIWHP and AHL. This is to say that those who had low CMIWHP had also IHL and likewise those who had medium CMIWHP had MHL but there has been mismatch between high CMIWHP and AHL. The results also in Table 4 show that only 17.5% had high CMIWHP. It can be observed that low level of CMIWHP can be attributed to the fact that health professionals have not been welcoming such interactions very much as it was explained by this middle aged male participant:-

“Doctors and nurses are not the kind of people to be questioned a lotthey don’t welcome thatwhen you ask a lot they see you a much know person and interfering intoWhere else can we get such informationsee the radio and TV stations mostly are busy entertaining ...playing music and moviesnewspapers are mostly doing business ...politics and current issues are what mostly featuring in these newspapers ...We sometimes really like to know about our health and the like.... but where do we get such information ?....

Thaker (2008) argues that how patients connect with the healthcare professional also influences communication between the doctor and patient. The role of healthcare systems in addressing the challenges of predominantly low levels of health literacy in populations is very strong in the literature (Canadian Council on Learning, 2008; Nakayama *et al.*, 2015; Sorensen *et al.*, 2015), despite health systems continuing being less responsive to the issue of low health literacy (Paasche-Orlow, 2011; Penaranda *et al.*, 2012; Palumbo, 2017). It can be observed from the FGDs what people have been expecting from the health care sources and the kind of response they received. Apparently, the kind of response received from the healthcare systems have been hindering gaining access to, understanding and using health related information. It is obvious that if such information is inadequate definitely individuals’ demands for such information are likely not to be met. This implies that low HL is attributed to inadequacy of health information as explained by this participant in a FGD. Undeniably, health professionals-patients interaction could have been the most effective source of health information when it is that effective. What has been

learnt from the FGD is that these professionals have not been allowing a lot of questioning from their clients so this implies that this source has not been in a position to serve as an effective source. Almost similar observation has been made by Nutbeam (2018:4) who claims that sometimes patients find it very difficult to interact “with a person (like a doctor) whom they find unfamiliar and intimidating”. It is no wonder that HL is observed to be low in the study area given these circumstances.

Another important aspect which emanated from the FGDs was on how health information is presented. Of interest with respect to health information presentation is the language used. The most vital here is the level of simplification of the language used for the lay persons to understand. From the FGDs it came clear that the language used has sometimes not been simplified enough for lay person’s consumption. This by itself, unquestionably, stands as a barrier towards understanding and using such information in ways which promote and maintain good health. It is reported by Williams *et al.*, (1995) and Davis *et al.*, (2002) that barriers in language and communication are also associated with low HL and result in impaired communication with medical providers. One key informant from the health department when asked on how they try to bring medical and health messages to lay people’s understanding, he responded:-

“We have been trying to simplify our communication with lay people whenever it has been possible. But sometimes it becomes difficult to really get medical issues to such levels. We, healthcare professionals have our own culture and language. It is the culture of medicine and the language of our specialty as a result of our training and work environment.”

It is therefore apparent that given such circumstances CMIWHP cannot realize its intended targets due to the ways health professionals communicate with the general public. In a way if these professionals are the key source out of which lay people are expecting to gain knowledge on health matters are so much sticking to their culture and language then an obvious barrier is created when it comes to accessing such information. When a particular communication is in plain language there are higher chances that the listener or reader can understand what is communicated the first time they hear or read it. Communicating in plain language makes it possible for the provision of meaningful and reliable information. This has been the concern of the World Health Organization (2013) when it comes to building HL together with making health information materials sensitive to differences and diversity in cultures, sex, age and individuals in their content and format. Definitely, HL problem is likely to be created when organizations or people create and give others health information that is too difficult for them to understand. Another observation made during FGDs which also affects HL is on the interaction between health workers and patients. Level of interaction between health workers and patients is considered to have influence on the transfer of health information to the patients as stated by a participant in a FGD at Doma:-

.....when I go to the hospital I get to know at least on the symptoms, causes and preventive measures for certain disease(s)but this depends very much on how interactive a particular health worker would be when attending to yousometimes some of these health workers are not that much interactivethey will simply provide you with the medication and that's it

Obviously when a person is ill, s/he is expected to visit a healthcare facility or doctor and this encounter involves a reciprocal set of obligations and privileges. It can be implied from the FGDs that in a way health professionals have so much focused on the medication aspects ignoring the role of providing information related to diseases (i.e. on symptoms and preventions). Lalazaryan and Zare-Farashbandi (2014) argue that health workers have another role beyond just providing medication to patients. Transfer of health information by educating the patients and encouraging them to search for related information is considering being a role that health workers have to play towards preventing diseases. This is supported by Making Every Contact Count Approach (NICE, 2007 as cited by NWPH², n.d.) and Beck, *et al.*, (2002).

2.1.6 Ethical Issues

The protocol for the study was approved by the University of Zambia (UNZA). Local research clearance was granted by Morogoro municipality and Mvomero district administrative officials. In order to avoid any impediment to the research process the researcher had to clarify the purpose of the study to the local government and village leaders. Introducing the purpose of the study to the local leadership facilitated the process of identifying the key informants for qualitative interviewing. The researcher obtained the written and oral (for those who couldn't read and write) informed consent from all those who participated in the study, and they were informed of their right to withdraw from the study at any time. The participants were assured of their anonymity in that none of information from them will be attributed to their names. Permission was sought from individuals to use various photographs in this report in which they appear.

2.1.7 Conclusions and Recommendations

It can be observed that the efforts to address the challenges towards effective CMIWHP have not realized its intended objectives towards greater patients' empowerment to navigate, understand, and use health information and services in Tanzania. As it has been witnessed during FGDs a number of barriers and challenges have been identified which had negatively impacted on the CMIWHP in the study area. Consequently, low CMIWHP has been observed in this study which resulted into inadequate health literacy from the majority of the respondents. This implies that such contacts (interactions) have not managed to influence information exchange and hence impacting on HL. In light of that, it is concluded

² North West Public Health (n.d). Evaluation of Approaches to Health Literacy in Ashton, Leigh and Wigan <http://www.nwph.net/nwpho/Publications/NHS%20ALW%20Health%20Literacy%20Final%20Oct%202012.pdf>

that despite the potentiality of CMIWHP to serve as health information source, a number of barriers to CMIWHP effectiveness still exist. It is recommended that further initiatives should be devised to improve CMIWHP through addressing the challenges facing this important source of health information.

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eHealth strategy development: a case study in Tanzania

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**MINING SECTOR REFORMS IN THE CONTEXT OF FIFTY YEARS OF
INDEPENDENCE IN TANZANIA: A REFLECTION OF MWALIMU NYERERE'S
LEGACY**

By

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ABSTRACT

This paper discusses Tanzania's economic reforms in the context of fifty plus years of independence. Specifically, it focuses on how these reforms have impacted on the mining sector and how the reforms are in agreement with what Tanzania's founding father Mwalimu Julius K. Nyerere advocated in relation to resources governance. This paper introduces the reader to the theoretical issues on government and economic reforms, and an overview of Tanzania's reform of the economy following the economic hardships of the late 1970s and the 1980s. Generally, the paper has attempted to review Tanzania's mining sector on basis of Mwalimu Nyerere's belief that a country should benefit from her natural resource base. In particular the paper examines issues of ethics and resource governance as advocated by the father of the Nation, Mwalimu Nyerere. In addition to the above, the paper further highlights reforms in Tanzania's mining sector by analysing successes, failures and lessons learnt in Tanzania both before and after the reforms. To get a better understanding of the above, issues around the legal and policy environment in relation to the mining sector have been analysed in the context of reforms in Tanzania. The paper also discusses other cross cutting (legal and policy) reforms made in Tanzania in the last fifty plus years of independence which have impacted on Tanzania's mining in relation to Mwalimu Nyerere's perspectives.

1.0 INTRODUCTION

Tanzania government embarked on economic reforms³ in the 1980s following financial crisis that was facing the country (Muhanga and Nombo, 2010; Muhanga, 2012; Gibbon 1993). By the mid 1980's Tanzania was the world's second poorest country based on GDP per capita (Reed, 1996). Tanzania like other sub-Sahara African countries has been struggling to improve the prospects for development through rigorous and wide-ranging reforms in almost all sectors of the economy. Reforms have included economic liberalization and measures to confront the persistent economic crisis through Structural Adjustments Programmes (SAPs).

The major reforms undertaken by the government of Tanzania during the 1980's included both Tanzania's own structural adjustment programmes and donor-sponsored programmes⁴. Tanzania signed an agreement with the World Bank (WB) and the International Monetary Fund (IMF) in 1986 to adopt SAPs. It is evident that the economic reforms in Tanzania through trade liberalization and privatization had impacted various sectors, mining sector inclusive, with both successes and challenges being registered (Sawyer, 1988:11 as cited in Mutahaba *et al.*, 1993:35; UNCTAD, 2005; URT, 1997; Maliyamkono and Mason, 2006:151; URT, 2006; TIC, 2001; Muhanga, 2012). Tanzanians witnessed among others, the increase of Foreign Direct Investment (FDIs) in the mining sector, the sector which has an important contribution to make to the national economy, but over the past so many years the growth of African mining production has been lagging behind. The economic reforms in Tanzania went hand in hand with changes in legal framework and supportive policies in the mining sector; of interest to this discussion are the Mineral Policy of Tanzania (1997), the Mineral Act of 1998, the Mineral Policy of 2009, and the Mining Act of 2010 (Muhanga, 2012; URT, 1998; URT, 1997; URT, 2009; URT, 2010).

It is evident that the economic reforms are neo-liberal oriented (Reed, 1996; Muganda, 2004; Lugalla, 1995; Gibbon, 1993; Muhanga, 2012), and despite the fact that the founder of this nation Mwalimu Julius Nyerere did not believe in neoliberalism, but it can be observed that the mining sector reforms are reflective of certain sentiments which Mwalimu Nyerere advocated in his *Ujamaa* development ideology. It is obvious that at times Nyerere seemed to oppose capitalists' sentiments and its neo-liberal options, it is the interest of this paper to review Tanzania's mining sector reforms on the basis of Mwalimu Nyerere's belief that a country should benefit from her natural resource base. In cognizant of the importance of the mining sector⁵ towards national development in terms of its contribution to Gross Domestic Product (GDP) and bearing in mind that Nyerere insisted on adherence to ethics, this paper also examines how the mining sector reforms are reflective of issues of ethics and resource governance as advocated by the father of the

³ For the purpose of this paper, *economic reforms* shall refer to any change in the economy for the better because of correcting abuses in the economy. Economic reforms shall include but not limited to the following: improving a system of law, regulations, procedures and policies, organizing and making changes to economic aspects of the society, so that it operates in a fairer or more effective way

⁴ National Economic Survival Programme in 1981 and the Structural Adjustment Programme in 1983, Economic Recovery Programme (ERP) in 1986

⁵ The mining sector in Tanzania contributes about 2.7% of GDP and is an important earner of foreign exchange in Tanzania

nation Mwalimu Nyerere in the context of fifty plus years of independence. Generally, this paper examines successes, failures and important lessons for the future. This discussion however is acknowledging the fact that the heart of the problem of interpreting the impact of policy lays in the separation of the policy effects from the influence of factors exogenous to the policy framework. Even when there is a convincing case to be made for particular policy interventions, their impact may be mediated by the exogenous environment.

1.1 Government and Economic Reforms: Theoretical Issues

Economic reforms are being undertaken by governments almost throughout the developing world today, preceded in most of the countries by a fiscal and balance of payments crisis. There are a number of models, approaches and theories that do explain reforms.

1.1.1 Neoliberalism Approach to Economic and Social Policy

The market-driven approach to economic and social policy based on neoclassical theories of economics (Aihwa, 2006; Cohen, 2007) has had significant input to the economic reforms throughout the world. The approach stresses the efficiency of private enterprises, liberalized trade and relatively opens markets, and therefore seeks to maximize the role of the private sector in determining the political and economic priorities of the state. This model is linked with the neoliberal thinking which describes an internationally prevailing ideological paradigm that leads to social, cultural, and political practices and policies that use the language of markets, efficiency, consumer choice, transactional thinking and individual autonomy to shift risk from governments and corporations onto individuals and to extend this kind of market logic into the realm of social and affective relationships (Aihwa, 2006). Neoliberalism seeks to transfer control of the economy from public to the private sector under the belief that it will produce a more efficient government and improve the economic health of the nation (Cohen, 2007). SAPs have a root from market-driven approach to economic and social policy based on neoclassical theories of economics. It is evident that the concrete policies advocated by neoliberalism is often taken to be John Williamson's "Washington Consensus", a list of policy proposals⁶ that appeared to have gained consensus approval among the Washington-based international economic organizations (like the International Monetary Fund (IMF) and World Bank (WB) (Williamson, 1990). The IMF and WB supported economic reforms in Tanzania through SAPs, hence the reforms in Tanzania reflected a lot from this approach.

1.1.2 Holistic Reform Theory

This theory is reported to have formed a basis for the acceleration of market reforms that began in the mid-1980s in China. Holistic reform theory argues that governments should rid itself of the moribund planned economy and ambitiously pursue building a market economy. Application of the theory calls for coordinated progress in several areas, including concurrent development of autonomous businesses, a competitive market system, and macroeconomic management (Caixin Weekly, May 14th, 2011). The Holistic Reforms

⁶The list includes fiscal policy, redirection of public spending from subsidies (especially what neoliberals call "indiscriminate subsidies") and other spending neoliberals deem wasteful, tax reform, interest rates, floating exchange rates; trade liberalization – liberalization of imports, liberalization of the "capital account" of the balance of payments, privatization of state enterprises; deregulation – abolition of regulations that impede market entry or restrict competition, legal security for property rights and financialization of capital.

Theory argues that the socialist market economy system is an organic whole and cannot be divided haphazardly. Tasks must be accomplished one at a time; however they are closely related to one another, as in any system; these points to the holistic nature of the country's openness and reform (Caixin Weekly, May 14th, 2011). In 1990s, many scholars extended the Holistic Reform Theory to embrace the social and political arenas, arguing that market reforms must be carried out alongside political and legal reforms. This perspective finds a lot of meaning in the context of Tanzania's economic reform. Effective reforms call for coordination of reforms in the economic, social and political arenas.

2.0 NYERERE'S DEVELOPMENT IDEOLOGY AND SOCIOECONOMIC DEVELOPMENT IN TANZANIA

2.1 Nyerere's *Ujamaa* Development Ideology

Any forward looking Tanzanian will *ad infinitum* have something to reflect on what Mwalimu advocated for during his great times, despite various claims from those who did not support and believe in *Ujamaa na Kujitegemea* that socialism and self-reliance ideology did a lot of harm than good to Tanzania.

2.2 *Ujamaa na Kujitegemea*⁷ Development Ideology

Nyerere took initiatives to introduce new statement in the TANUs aims and objectives to achieve democratic and socialist Tanzania which was reflected in relevant section of the 1962 constitution, among others, the following statements are reflective of the discussion for the purpose of this paper:-

- (i) To establish a democratic and socialist form of government which would be devoted to:-
 - (a) Consolidating national independence and ensuring a decent standard of living for every individual
- (ii) To promote thoroughly the ways of increasing the wealth of this country so as to help more people by:
 - (a) Controlling collectively the means of producing national wealth including the national resources such as land, air, water, power
 - (b) To promote to the highest level the possible cooperative functions pertaining to the means of production, distribution and exchange
 - (c) To encourage private enterprises which are run for the benefit of the whole country (TANU Constitution, 1962, Dsm pp1-2?)

Tanzania's intention to build a socialist and a self-reliant society is well articulated in the *Azimio la Arusha*⁸. In an attempt to intensify democratic and socialist sentiments in Tanzania, in 1967 President Nyerere through the Arusha Declaration pointed out the need for an African model of development that formed the basis of African socialism, this was the *Ujamaa na Kujitegemea* ideology which later formed the basis of Julius Nyerere's social and economic development policies in Tanzania (Pratt, 1976; Pratt, 1991; TANU, 1967). The Arusha Declaration introduced the nationalization of the major means of the economy, this was central to the implementation of Ujamaa Development Policy in

⁷This was Nyerere's African Socialism which signified socialism and self reliance

⁸ The popular Arusha Declaration

Tanzania. Nyerere's philosophy of Ujamaa was an attempt to integrate traditional African values with the demands of the post-colonial setting. As a philosophy, the central objective of *Ujamaa* was the attainment of a self-reliant socialist nation (Ibhawoh and Dibua, 2003).

However even before the Arusha Declaration and the inauguration of Ujamaa (Nyerere 1968: 60) had identified national self-reliance as the only way out of Tanzania's poor economic situation. Reviewing the poor performance of the First Development plan in 1965, he pointed out that it was in the spirit of "ever increasing self-reliance" that Tanzania must face the coming fiscal year, adding that "our motto for the coming year must be self-reliance" (Pratt, 1976). Self-reliance was a call to Tanzanians to concentrate their energies and efforts upon what they can do with their own resources. "*Ujamaa*, he asserted, is opposed to capitalism, which *seeks to build its happy society on the exploitation of man by man*" (Nyerere, 1968). Mwalimu insisted on a need to create a socialist society, he defined who a socialist is and what constitutes a socialist society

"A socialist is a man who cares for his fellow men, who accepts that the proper and legitimate purpose of wealth is to provide for the welfare of mankind. A socialist society is a society of men with this attitude of mind. It is a society dominated by the spirit of Ujamaa, of family hood (Nyerere, 1962:1).

2.3 People the Ultimate aim of Development

The role of people in development has been extensively debated in philosophy and social and political science over the last several hundred years. The late Mwalimu J.K. Nyerere believed that development is about people, and once said:

"Every proposal must be judged by the criterion of whether it serves the purpose of development – and the purpose of development is the people!" (Nyerere, 1974).

Nyerere advocated and proclaimed that commitment to socialism had at its core concern with the moral quality life and ultimate aim of any meaningful development should be the people.

2.4 Nyerere on Foreign aid Trade Relations

Nyerere did not rule out foreign aid, far from it, but he wanted it to be regarded as a supplementary to national development effort, Nyerere further insisted on the developing nations to be cautious on aid (Pratt, 1976).

"The donors are not our relatives nor did charitable institutions- Nyerere tell the special TANU Conference (Pratt, 1976:232).

The Declaration stated publicly that "gifts and loans will endanger our independence", and that "gifts...have the effect of weakening [and] distorting our own efforts" (Nyerere, 1968: 239).

Nyerere advocated for trade relations with western countries selectively (selective linking and not delinking). Nyerere realized how important it was for a developing country like Tanzania to integrate with other nations while minimizing the levels of dependency by stressing that by self-reliance Tanzania was not intending to pursue isolationist policies.

"The doctrine of self-reliance does not mean isolationism. For us, self-reliance is a positive affirmation that for our own development, we shall depend upon our own resources" (Nyerere, 1968: 319).

2.6 Nyerere on the major means of production

Nyerere recognized the importance of the public ownership of the major means of production and exchange; he wanted the major means of the economy to go under the hands of the public and decided to nationalize the major means of the economy. For the purpose of the nationalization exercise, economic activities were grouped into three categories -those restricted exclusively to state ownership; those in which the state had a major share and controlling power and those in which private firms may invest with or without state participation. Immediately following the promulgation of the Arusha Declaration, the Nyerere regime announced the nationalization (Pratt, 1976, Arkaide, 1973: 37), by the end of 1967, the "commanding heights" of the economy had come under the direct control of the state

2.7 Nyerere and people's participation

Indeed, Nyerere sought to institutionalize a relatively participatory political and social process from the early days of independence and throughout the transition to multi-parties (Mutahaba and Okema, 1990; Landau, 1998: 5)

One of the greatest legacies of Nyerere, among others, is his persistence on the advocacy of the supremacy of the people. He insisted that the sovereignty of the people must be seen from political economy point of view. In a nutshell, what this means is that the people must be able [or enabled] to control their destiny by controlling their economic activities, decide on the nature of the laws and political institutions that they will be governed by, and above all, they are free from exploitation, hunger, lethargy, disease and tyrannical rule.

"True development means progress in which all people share, and can hope to share, and from which all can benefit. People cannot be developed they can only develop themselves. This means that the process has to involve those impoverished individuals and communities directly concerned in-order to make it meaningful and beneficial to them. When people become the active participants in the decisions affecting their lives, they embody the very process of change because they own it." (Nyerere, 1968).

This has remained an important aspect of development process even in the modern times. Nyerere advocated for the primacy of the state and public ownership of property. As Stoger-Eising rightly notes: "(f)or Africa's future the indigenous elements in Nyerere's thought are, nevertheless, of great potential significance" (Stoger-Eising, 2000: 140).

2.8 Good governance and adherence to leadership ethics

Nyerere was highly emphatic on good governance which, in the 1990s, has become a buzz word, if not a cliché in leading development literature. Julius Nyerere's leadership commanded international attention and attracted worldwide respect for his consistent emphasis upon ethical principles as the basis of practical policies (Legum and Mmari 1995). Nyerere's policy initiatives rested on an ethical foundation and on an understanding of the challenges which Tanzania faced.

In 1967, under Nyerere's supervision, TANU introduced a 'Leadership Code' for all its leaders to report regularly to the President on their wealth and income, and for the next

three decades, he argued that the state officials must be accountable to the people. In fact, in his latest book entitled 'Our Leadership and The Destiny of Tanzania' (1995), Nyerere still emphasized on leadership ethics and good governance: Government officials, especially those at the top level, should be "persons of integrity of principles, and who respects the equal humanity of all others regardless of their wealth, religion, race, sex, or differing opinions" (Nyerere, 1995). It is all over in literature (Legum and Mmari, 1995; Araia, *n.d*) that Mwalimu emphasized the benefits of good leadership and the principles of good leadership, stewardship, service and commitment.

It is evident that *Ujamaa* was founded on a philosophy of development that was based on three essentials - freedom, equality and unity. The ideal society, Nyerere (1967: 16) argued, must always be based on these three essentials. These are obvious regarded important towards nurturing good governance. When the three essentials prevail definitely there must be limits set by public ethics or laws to limit private interests against public desire.

2.9 Natural Resources Governance

The TANU "Creed"⁹ outlines the principles of socialism and the role of government, of interest to this paper is related to issues of natural resources governance which states:-

"That all citizens together possess all the natural resources of the country in trust for their descendants"

That in order to ensure economic justice the State must have effective control over the principal means of production; and That it is the responsibility of the State to intervene actively in the economic life of the Nation so as to ensure the wellbeing of all citizens and so as to prevent the exploitation of one person by another or one group by another, and so as to prevent the accumulation of wealth to an extent which is inconsistent with a classless society (TANU, 1967:1).

It is against these principles of socialism and self-reliance that Mwalimu Nyerere's regime managed the natural resources of this country. One of the very major aspects Nyerere insisted when it came to distribution of wealth of this nation was to avoid unequal distribution of resources. Nyerere argued that wealth exists to provide for human needs and that no social and economic system is just which encourages selfishness and which permits severe inequalities in the distribution of wealth (Pratt, 1976: 71).

3.0 NYERERE: A VISIONARY AND FLEXIBLE LEADER

Every nation and every generation has their heroes. Julius Kambarage Nyerere, fondly known as Father of the Nation and Mwalimu is Tanzania's hero.

Nyerere was not in the first place in favour of the private sector involvement where the public had minimal participation. It is reported by Pratt (1976) that Nyerere reacted

⁹ The Arusha Declaration was divided into five parts ; part One was on TANU creed the other ones were on The Policy of Socialism; The Policy of Self Reliance; the TANU Membership; and the Arusha Resolution

strongly to National Development Corporation (NDC)¹⁰ when it encouraged joint ventures in which NDCs participation was very minimal. It was in early 1966 Nyerere instructed NDC not to seek an indiscriminate maximization of private investment by calling upon NDC to be the agency through which the government would gradually acquire majority control in key areas of the economy. It is evident (Pratt, 1976: 230) that despite Nyerere encouraging active participation of the state in development activities i.e. when he had misgivings on the investment policy of the National Development Corporation and realized that NDC had limited capital funds thought of additional private investment as possible both domestic and foreign. This was before Arusha Declaration.

Nyerere had even a cautious if not negative attitude towards the donors:

“The donors are neither our relatives nor charitable institutions- Nyerere told the special TANU Conference (Pratt, 1976: 232) after realizing that Tanzania could not rely on foreign sources for development, did Nyerere see the danger of over exposing the country on donor pressures when over relying on foreign aid.

Despite this position, Nyerere being a visionary leader realized that there is a need to adjust to changes by advocating for trade relations with western countries selectively (selective linking and not delinking). *“Self-reliance, he said, “does not imply isolationism ...it is not the same thing as saying we shall not trade with other people” (Nyerere, 1967: 321).*

He further argued that:

“I do not think that there is any free state in Africa where there is sufficient local capital, or a sufficient number of local entrepreneurs for locally based capitalism to dominate the economy ... A capitalistic economy mean a foreign dominated economy. These are the facts of the Africa's situation. The only way in which national control of the economy can be achieved is through the economic institutions of socialism” (Nyerere, 1967: 264).

This is obvious that Nyerere observed the low levels of technology and skills that most of developing countries such as Tanzania were in possession of hence having no choice but to bargain as best they can for the skills and technologies which they need (Pratt, 1976: 248-249)

It is evident (Nyerere, 1970: 6-7; Pratt, 1976:250) that Nyerere almost changed his position after Arusha Declaration on foreign sources of capital and expertise.

“We have no alternative. The world supply of disinterested altruists and unconditional aid is very small indeed and however self-reliant we try to be in our economies and our development we are up against the fact that progress out of poverty has everywhere throughout history required some injection of capital or expertise . Even the largest states of the world have used outside resources; small ones have to use more. It becomes a question of how far we will go and what kind of compromises we will make. We cannot refuse to make any. (Nyerere, 1970: 6-7).

¹⁰ A public corporation which was established in 1965 to manage a variety of publicly owned companies and to be the agent for the investment of public funds in the manufacturing , mining and commercial sectors of the economy

4.0 ECONOMIC REFORMS IN TANZANIA: AN OVERVIEW

The adoption of economic reform programs in Tanzania in the 1980s came forth due to the steady decline in economic growth in the late 1970s that led to a financial crisis in the early 1980s (Muhanga and Nombo, 2010; Muganda, 2004). The crisis partly resulted out of economic policies pursued by Tanzania under a public sector-led economy embedded in the 1967 Arusha Declaration, and partly as a result of exogenous factors, including deterioration in the terms of trade in the late 1970s and early 1980s, the collapse of the East African Community in 1977, and the war with Uganda's Iddi Amin during 1978–79 (Muganda, 2004).

The history of SAPs donor funded programs in Sub-Saharan Africa begins with the World Bank's 1981 Berg Report on social and economic crisis in Africa. In response to this report the World Bank recommended the adoption of structural reforms or SAPs (Lugalla, 1995).

Structural reforms generally involve adjusting the economy in order to properly manage the balance of payments, reducing fiscal deficits, increasing economic efficiency and encouraging private sector investments and export-oriented production. According to Lugalla (1995: 44), SAPs had a number of principles, the major one being the reduction of public borrowing and government expenditure (particularly in the unproductive sectors of the economy), control of money supply, devaluation of the local currency, and the introduction of user charges (cost-sharing) in education and health. Other measures included trade liberalization, reduction of tariffs, creation of conducive environment for foreign investments, abolition of price controls, privatization of parastatal withdrawal of subsidies, retrenchment of workers and, above all, democratization¹¹. Since the early 1980s, most countries in sub-Saharan Africa, (Tanzania inclusive), have been forced to implement these measures as a pre-condition to aid and loans from the IMF, the WB and other donor agencies. The early 1990's has witnessed Tanzania changing its policies and move away from a centralized state command economy to a market based economy, critically now letting the private sector to engage in the business of different industries to further the economy which was not performing very well. It was only after 1995 that real progress attained towards a market-based economy. The process of privatization (which had formally begun in 1993) accelerated, and by 2003 some 380 out of 410 parastatals had been privatized to foreign and (in some cases) local investors. This also opened up private investment in the mining sector (URT, 2011).

5.0 TANZANIA'S MINING SECTOR PRE-REFORMS

Tanzania is the fourth country with richness of mineral resources in Africa, endowed with varieties of minerals ranging from precious metals, precious collared gemstones, diamonds, base metals, platinum group of metals (pgm), coal, agro-minerals, chemical minerals and industrial minerals (Muhanga, 2012; Curtis and Lissu, 2008:13).

The earliest recognized mineral prospecting and mining in Tanzania took place during the German colonial period, beginning with gold discoveries in the Lake Victoria region around 1894 (Nilsen, 1980). Tanzania being the fourth country with richness of mineral

¹¹ Mostly signifying multiparty politics

resources in Africa, apart from South Africa, Democratic Republic of Congo, and Nigeria. However, the minerals in Tanzania remained untapped and underutilized prior to the reforms. Nonetheless, gold production was substantial and increased steadily until 1966 when Geita Gold Mine (GGM) closed. By 1967, the gold industry had declined to insignificant level due to the closure of the mines, whereas all major means of investment was controlled by the government, and production was mostly from artisanal mining. During this period there was no existence of foreign investment as foreign investments were perceived as capitalistic and exploitative following the adoption of Tanzania's ideology of "*Ujamaa na Kujitegemea*" in 1967.

It is reported by Maliyamkono and Mason, (2006:296) that during the 1970s to 1980s the mineral sector development operations were largely state owned and run by government enterprises known as National Development Corporation (NDC), and later the State Mining Corporation (STAMICO) in 1974. The mining activities were not allowed without the state participation. However, from the late 1980s to 1995 artisanal and small-scale mining activities started to boom¹². This period (late 1980s to 1995) was generally characterized by a gold rush whereby many people from both local communities and urban centres started to get heavily involved with gold mining though with poor/local and/or low levels technology. Among others Lake Victoria Goldfields, Mpanda Mineral Field, Lupa Goldfields became very popular. Prior to privatization in the mid-1990s, exploitation of these resources was limited. This small scale mining employed a huge number of people in gold mining and trade activities, employing around 500,000 people (Maliyamkono, 2006:297). Artisanal mining was a common feature of the mining sector in Tanzania despite being illegal, with the miners having no formal property rights (Zamora, 1999; Peake, 2000; (Bullington, 2001; Labonne and Gilman, 1999; Parsons, *n.d*).

6.0 MINING SECTOR: LEGAL AND POLICY ENVIRONMENT IN THE CONTEXT OF ECONOMIC REFORMS AND REFLECTION OF NYERERE'S LEGACY

Due to the economic reforms undertaken by the government of Tanzania from the mid-1980s, mining sector was reformed to match with a clear shift in favour of private sector development and market-oriented economic management. Therefore, these changes have made the government to redefine her roles from that of owning and operating the mines to that of providing clear policy guidelines, stimulating private investment and providing support for investors. The government of Tanzania by the mid-1980s realized that the past development policies and strategies were not adequately responding to changing market and technological conditions in the regional and world economy and were also not adapting to changes in the domestic socio-economic conditions (Muhanga, 2012). In light of that, the economic reforms in Tanzania had to go hand in hand with changes in legal framework and supportive policies; of interest to this discussion are the Mineral Policy of Tanzania (1997), the Mineral Act of 1998; Mineral Policy of 2009, the Mining Act of 2010, New Investment Policy and the Tanzania Investment Act No. 26 of 1997 and the Mining (Environmental Management and Protection) Regulations of 1999. Despite limitations this policy and legal framework has a number remedies to the mining sector some of which are reflective of what Mwalimu Nyerere advocated under the *Ujamaa na Kujitegemea* development

¹² During the second phase government under the Presidency of Mzee Ali Hassan Mwinyi

ideology. It should be made clear that Mwalimu Nyerere did not believe in neo-liberalism but rather what was advocated by him are reflected in the mining sector reforms in Tanzania. At the core of these policy and legal framework is what reflects Nyerere legacy despite some failures.

It is evident that the mining sector reforms intended to stress on private sector led mineral development while the major roles of the government being regulating, promoting and facilitating mining development and related activities (URT, 1997; URT, 1998; URT, 2009). One of the objectives of the Mineral Policy of 2009 states:

“To improve the economic environment in order to attract and sustain local and international private investment in the mineral sector;”

This particular intention is reflective of what Nyerere insisted when the state seemed to fail to turn to the private sector (Pratt, 1976 :) this was reflected in new TANUs aims and objectives which Mwalimu made efforts to introduce in order to achieve democratic and socialist Tanzania, in fact Mwalimu did not believe in neo-liberalism but he recognized significant role of the private sector in complimenting the efforts of the state.

“To encourage private enterprises which are run for the benefit of the whole country (TANU Constitution, 1962:1-2???)

Nyerere proclaimed that however self-reliant a nation can try to be in socio-economic development cannot stand against the fact that progress out of poverty has everywhere throughout history required some injection of capital or expertise.

“.....Even the largest states of the world have used outside resources; small ones have to use more. It becomes a question of how far we will go and what kind of compromises we will make. We cannot refuse to make any. (Nyerere, 1970:6-7)

The Mining Act, 2010, (see section 8(2) and 8(3)), among other things, places mining rights particularly in small scale mining, dealing in minerals and gemstone operations, in the hands of Tanzania nationals and limitedly to corporate bodies who may include foreign nationals whose interests may not exceed 50% in the undertaking (URT, 2010:). Minerals Policy of 2009 under policy statements (iii) and (iv) affirms the government commitment:

- (iii) *The Government will ensure that medium and small scale gemstones mines are entirely owned and operated by Tanzanians;*
- (iv) *The Government will promote participation of local investors in gemstone mining; and*

This is what Mwalimu insisted when it came to reaping benefits from the natural resources base of this country, right from the beginning Mwalimu insisted on *Africanisation* and later *nationalization* of the major means of production. This is fairly reflected in TANUs objectives which states:

“To promote thoroughly the ways of increasing the wealth of this country so as to help more people by:

Controlling collectively the means of producing national wealth including the national resources such as land, air, water, power”

This later strengthened by Azimio la Arusha which insisted on the having all the natural resources and other major means of production under the hands of the mass. This is well articulated in The Arusha Declaration part one which was on TANU creed insists: ‘*that all citizens together possess all the natural resources of the country in trust for their descendants*’. Nyerere wanted to ensure economic justice and this is only when the state has effective control over the principal means of production.

The mining reform (URT, 1998; URT, 2009; URT, 2010) has among other things removed most of past ministerial discretionary powers, by introducing a mining advisory committee responsible of advising the Minister on decisions to make pertaining to mining sector (*see 23.-(1) of the 2010 Mining Act*). This is in line with what Mwalimu advocated in the sense that socialist society is a society of equals and among the equals no need for discretionary power. Nyerere sustained that: *"our aim is to remove fear from the minds of our people. Our aim is to hand over responsibility to the people to make their own decisions"*. Nyerere wanted governments to serve interests of the people by involvement them. The reforms through advisory committee have created a power checking mechanism on public officials. Despite the fact that Nyerere advocated for the primacy of the state and public ownership of property, arguably delineated a cautionary note: *"State ownership and control of the key points of the economy," says Nyerere "can in fact lead to a greatest tyranny if the state is not itself controlled by the people, who exercise this control for their own benefit and their own behalf....."*

The mining reforms require that foreign owned mining gemstone companies cede 50% of its shares to the public/government (URT, 2010). This is insisted by one objective of the Mineral Policy which intends:

"To facilitate, support and promote increased participation of Tanzanians in gemstone mining", with policy statement (ii) stating:

"The Government will ensure that large scale gemstones mines are owned by Tanzanians to not less than 50 percent shares ..."

Nyerere believed that *"True development means progress in which all people share, and can hope to share, and from which all can benefit"* (Nyerere , 1968). This is an important which is reflected from the reforms. Further to this Nyerere realized that capital was scarce in most of developing countries, of technical capacity also lacking for the state to manage and exploit (Pratt, 1976: 256).

"I do not think that there is any free state in Africa where there is sufficient local capital ...or a sufficient number of local entrepreneurs for locally based capitalism to dominate the economy..... (Nyerere, 1968)

The reforms are advocating for the highest levels of the involvement of the people in decision making so as to reap benefits from the mining sector. Nyerere believed in the potentials of people towards their development and what it takes for any meaningful development:-

..... *When people become the active participants in the decisions affecting their lives, they embody the very process of change because they own it.* ”

Despite the fact that licenses to mine for gemstones are only supposed to be granted to Tanzanians, regardless of the size of the operation, the exception is where the Minister determines that the development is most likely to require specialized skills and technology. The reforms are advocating for the controlled foreign investments in mining sector.

Much as it is obvious that Nyerere was cautious on the foreign investments, but being self-reliant to him did not mean isolating ourselves from the rest of the world. “*Self-reliance*”, he said, “*does not imply isolationism ...it is not the same thing as saying we shall not trade with other people*” (Nyerere, 1967: 321). Despite Nyerere sceptics on the viability of the neo-liberal options at different times during his leadership Nyerere advocated for the controlled involvement of the private sector. Nyerere advocated for selective linking and not delinking.

7.0 NYERERE DEVELOPMENT IDEOLOGY, MINING SECTOR REFORMS AND SOCIOECONOMIC DEVELOPMENT IN TANZANIA: DIFFERENT MEANS SAME END?

Obviously, Mwalimu was sceptical about whether or not the national objectives set under the socialism and rural development model would be met using the new approach. This led Tanzania to accept to reform the economy after a long period of resisting calls from the international community particularly the IMF and the World Bank for a shift in economic policy towards increased deregulation in all spheres of the economy.

Nyerere was particularly concerned about the implications of the IMF's prescriptions to reduce expenditure and raise taxes, for Tanzania's political and social stability. He argued that "there is a limit to which taxes can be raised without forcing the people into the streets and the soldiers out of the barracks" (*Africa*, June 1984: 13-14). Even though by the 1980s, Tanzania had been forced by crippling economic difficulties to adopt most of the IMF conditionalities, Nyerere remained sceptical about the viability of the IMF'S neo-liberal option. In 1983, he insisted rather defiantly that:

The IMF goes out and makes conditions and says, "If you follow these examples, your economy will improve". But where are the examples of economies booming in the Third World because they accepted the conditions of the IMF? The IMF may be economic experts but I am an expert in my own country! (*Africa*, June 1983: 73)

It is obvious that what the reforms are striving at is simply to serve the interests of Tanzanians and assure the mass benefits from their natural resources despite the observed inefficiencies and shortfalls which Nyerere stressed for. The reforms took initiatives to govern the country's natural resources for the benefit of the people while in mind there is limited nature of capital and expertise our country is having hence a need to involve the private sector . Despite Nyerere skepticism on the viability of the neo-liberal options at different times during his leadership Nyerere advocated for the controlled involvement of the private sector.

People's participation in decisions affecting them the public roles being on policy formulation to accommodate the overall and sectorial government policy framework. URT (1997) the Mining (Environmental Management and Protection) Regulations of 1999.

The project proponent must produce an Environmental Management Plan acceptable to the Government. Approval of a project involves screening, scoping, EIA and EMP evaluation by government experts. In addition, relevant Regional Administration, Local Government Authorities and the public are consulted and their opinions taken into account during the approval process (Ngonyani, 2000).

; To ensure that wealth generated from mining support sustainable economic and social development URT (1997) and their opinions taken into account during the approval process (Ngonyani, 2000).

8.0 ECONOMIC REFORMS AND THE MINING SECTOR: SUCCESS FAILURES AND LESSONS LEARNT

According to Sawyer (1988:11), as cited in Mutahaba *et al.*, (1993:35) the SAPs principles such as trade liberalization, creation of conducive environment for foreign investments, privatization of parastatals and advocating minimal role of the state in the economy have impacted the Tanzanian economy the mining sector inclusive both positively and negatively. These impacts include; increased FDIs inflow¹³ into Tanzania's resource rich mining sector (UNCTAD, 2005), and the government managed to establish the Public-Private Partnership in the mining sector.¹⁴ Mining remained the leading sector¹⁵ in terms of investment occupying 23% between 1995-2004 (Maliyamkono and Mason, 2006:151). The mining sector continues to be one of the biggest contributors to the country's revenue through the payment of mineral royalties¹⁶, employee income taxes and corporate taxes (URT, 2006; TIC, 2001; EIU, 1997). According Hart Group (2011) the benefits flows reported by companies in the TEITI (in US\$ million for 2008-2009) amounted to US\$ m99.46.

The reforms in Tanzania were expected to do much more good than harm, but that has never been completely the case. Despite the registered achievements, (Muhanga, 2012; UNCTAD, 2005; EIU, 1997; Maliyamkono and Mason, 2006:151) and good intentions of the mineral sector reforms there are a number of challenges which are partly caused by poor technology, lack of skilled personnel and absence of capital (Fraser and Lungu, 2006; Darimani, 2005), lack of political will and unethical leadership on the natural resources governance.

¹³ In 1992, there were ten Prospecting Licenses and nine Mining Licenses granted to private investors, the number has increased to over 5,900 Prospecting Licenses and 220 Mining Licenses in 2008, including six special mining licenses for gold in 2011.

¹⁴ Tanzania has been praised by UNCTAD for having good mining incentives, which have been making the country attractive to mining companies, which in the end made it possible to experience a boom in FDIs particularly in gold industries (UNCTAD, 2005).

¹⁵ Annual gold production from these mines is about 50 tones, putting Tanzania as the third leading gold producing country in Africa

¹⁶ Another important success incidence from the reform is on the changes brought about by the Mining Act (2010) in royalty rates compared to the royalties imposed by the 1998 Mining Act.

The extensive economic liberalization has contributed to further deepening the imbalance in the distribution of the benefits of mining in favour of transnational foreign mining companies due offering further incentives and protection for the corporate investments in the name of creative conducive environment for the investors (Darimani, 2005; Rugumamu, 2005; Fraser and Lungu, 2006; Darimani, 2005), the resentments on what the government is receiving from the large scale mining scales (LSMCs) versus the value of what is produced and exported (Fisher, 2007), the government has been blamed for doing too little to ensure that the people also benefit equally from the mineral wealth (Lange, 2007; Kitula, 2006, Rugumamu, 2005), the existence of the negative effects of mining with adverse effects to rural livelihoods that did not exist before the mining sector reforms, including existence of conflicts and poverty around the resource rich areas (Semboja, 2007, Kitula, 2006; Mwalyosi, 2004; Kitula,2006; Chachage,1995) even environmental effects and health hazards of the mining activities are still reported (Tambwe, 2008).

Lessons are numerous that can be learnt from the mining sector reforms in Tanzania including but not limited to the need for Institutional capacity and resources governance enhancement as the lesson here is that either the capacity of institutions responsible for the daily execution of such procedures are very low or there is a lack of seriousness and patriotism from the side of those charged with the responsibility of overseeing the sector. Another lesson is on Policy formulation process and the local communities' involvement where the Communities have been the least regarded and historically neglected in policy and other discussions related to mineral sector development. As a result, negotiations and discussions have been primarily between governments and mining companies and have not involved those whose lives and livelihoods are impacted directly and usually adversely by mining operations. With regards to Corporate Social Responsibilities (CSRs) the lesson learnt is that most of the LSMCs have only done the minimum. The argument is that the LSMCs need to have CSRs that will affect the well-being of the local communities hence guaranteeing social licensing for mining companies, which will in turn put off the conflicts, which are now on increase.

9.0 CONCLUSIONS

The intention to build a socialist society in Nyerere's mind where every member of a society will reap emanating from *Ujamaa na Kujitegemea* is reflected throughout the mineral sector reforms differently despite a number of drawbacks. The mining sector reform though neo-liberal in nature is also trying to put the people first, limited expertise and capital, political among others have accounted for a level registered in terms of achievement. The reforms are depicting good intentions of our government despite the challenges.

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**SOCIO-ECONOMIC FACTORS INFLUENCING LIVELIHOOD OUTCOMES
SUSTAINABILITY AMONG HOUSEHOLDS OF SUNFLOWER SMALLHOLDER
FARMERS IN IRAMBA DISTRICT, TANZANIA.**

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ABSTRACT

Sunflower is one among the major cash crops that is important in smallholder farmers' household livelihoods. Despite its potential to smallholder farmers' livelihoods there are imperfections along the production chain which lower its anticipated impact and leave smallholder farmers exposed to livelihood vulnerability, stresses and shocks. This study determined the levels of livelihood outcome sustainability among smallholder farmers' households and examined the influence of socio-economic factors on livelihood outcomes sustainability among households of smallholder farmers. The study adopted a cross-sectional research design and the sample size was 213 respondents. Quantitative data were analysed using descriptive statistics which were useful in the calculation and interpretation of livelihood outcomes sustainability index. Principal component analysis was used in order to scale out the socio-economic factors while multiple regressions were used to determine the influence of socio-economic factors on livelihood outcomes sustainability. Qualitative data were transcribed, categorised, coded, thereafter grouped into themes and analysed using constant comparison technique. Findings show that the majority of the smallholder farmers' households were categorised into lower levels of livelihood outcomes sustainability with a few households on higher levels of livelihood sustainability. Among the socio-economic factors influencing livelihood sustainability, household size, household head education, household asset index and total household savings were significant ($p < 0.05$). Provided that there are many households with lower levels of livelihood sustainability, it suggests that these households were not able to withstand livelihood shocks and stresses due to limited capabilities. Thus, it is recommended that members of households should consider diversifying their livelihood activities. This can be done through collective efforts by the smallholder to access micro credits from microfinance institutions and share investments into micro businesses such as retailing of sunflower by-products (seed cakes and cooking oil) in order to increase household incomes and hedge their chances of livelihood sustainability.

Keywords: socio-economic, livelihood sustainability, sunflower, smallholder farmers.

1.0 INTRODUCTION

Agriculture plays an important role in reducing rural poverty and is the major source of livelihoods in Africa, given that the majorities of the poor are in rural areas and employed in agriculture (Chongela, 2015; Sarris *et al.*, 2006; Macheche, 2004). Smallholder farming alone constitutes approximately 80% of all farms in Sub-Saharan Africa and employs about 175 million people directly (AGRA, 2014) and, within the rural population, it provides a livelihood for multitudes of small-scale producers (OECD-FAO, 2016). In Tanzania agriculture has a reasonable contribution to the Gross Domestic Product (Chongela, 2015) with 29.1% in 2016 (Deloitte, 2017). However, of late the contribution of the service sector is picking up when compared with the agricultural sector whose contribution is declining (Lyatuu *et al.*, 2015). The service sector (increased to 48% in 2013 from 14% before 2000) with the share of the agricultural sector in total GDP declining tremendously from almost 50% in 1990 to 23.8% in 2013 (World Bank, 2015).

Despite the declining contribution to GDP agriculture remains the source of economic livelihood for 66% of the population (Kinyondo and Magashi, 2017) particularly in rural areas. With 73 percent of the poor living in the rural areas, agriculture is dominated by about 3.7 million smallholder farmers and in 2017 the sector employed about 65 percent of the population (Deloitte, 2017). Smallholder farmers in Tanzania have commitment and reciprocal relationship with their farm land as they prioritize, invest in, and conduct their farming activities year in and year out (Anderson *et al.*, 2016). In return, agriculture provides them with sustenance, household income, investments and food security (Lyatuu *et al.*, 2015). Thus, agriculture provides the main income stream into the smallholder farmers' household, and supports nearly all of the household activities and, more importantly, most families consume what they grow, trade goods for other necessities and sell their crops or livestock for income (Rapsomanikis, 2015; NEPAD, 2013).

In Tanzania sunflower is cultivated by about 250 000 households of smallholder farmers owning an average of 0.4 to 2 hectares (1-5 acres) (TEOSA, 2012). It is estimated that more than 80% of these smallholder farmers are located in the Eastern and Central Corridor and in the Southern Highland Regions. In Singida Region sunflower is reported to be one of the major cash crops mostly dominated by smallholder farmers (Zilihona *et al.*, 2013). The crop is important in smallholder farmers' household livelihoods due to its income potentials (Ugulumu and Inanga, 2013) which enable households to meet and sustain household requirements.

Regardless of the observed contribution, sunflower smallholder farmers do not end up with optimum benefits (IFPRI, 2008) since the markets are not stabilised to the advantage of smallholders (Salisali, 2012). This is due to collusive price setting (Lubungu *et al.*, 2014) and relentless price variations determined by rural collectors (Beerlandt *et al.*, 2013; UNCTAD, 2015). Mostly, smallholder farmers sell their output immediately after the harvest to rural collectors at low prices (TZS 40,000/=) compared to the prevailing market prices (TZS 60,000/=) (Kawamala, 2012). This affects smallholder farmers' incomes to a greater extent as they are not paid according to quality of their harvested seeds despite having high yields. As a result some smallholder farmers in the central corridor regions are

still having poor livelihood outcomes despite their participation in sunflower production (Gabagambi and George, 2010).

Therefore, the observed imperfections (collusive price setting and lower prices) continue to leave smallholder farmers exposed (Gabagambi and George, 2010) and vulnerable to livelihood stresses and shocks which affect chances of livelihood sustainability. Kamarrudin and Samsudin (2014), Krantz (2001), and Chambers and Conway (1991) argue that a livelihood is considered to be sustainable when it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide livelihood opportunities for next generation which contributes net benefits to other livelihoods at the local or global levels and in short as well as long times. DFID (2001) describes livelihood to be sustainable when it can cope with stresses and shocks from the environment and also be able to maintain its capabilities and assets without undermining the environment.

The study contextualised the sustainability of livelihood on the ability of smallholders' households to increase household assets, improve financial status and ability to meet household expenditures (medical, school fees and expenses etc.), sustain household dietary requirements, and ability to diversify household income sources. Therefore, sustainability was considered to be a function of how assets and capabilities are utilised, maintained and enhanced so as to preserve the households' livelihoods. Understanding the status of household livelihood sustainability is important since households are endowed differently in terms of livelihood capability which has an implication towards livelihood sustenance (Fratkin, 2013) as they may view livelihood vulnerabilities and risks differently. Thus, the study objectives were to determine the levels of livelihood outcomes sustainability among smallholder farmers' households and examine the influence of socio-economic factors on livelihood outcomes sustainability among smallholder farmers' households. Basing on the objectives it was hypothesised that levels of livelihood outcomes sustainability between sunflower smallholder farmers' households do not differ.

2.0 METHODOLOGY

The study was conducted in Iramba District in Singida Region. Singida is among regions renown for production of sunflower in Tanzania (URT, 2017a). However, it was among the central corridor regions with low GDP (URT, 2017a; URT, 2017b) and a number of households having poor livelihoods (Gabagambi and George, 2010). Iramba District was selected because of having a high number of households participating in sunflower production as smallholder farmers (URT, 2016) and this provided an opportunity to analyse the chances of livelihood outcomes sustainability at household level since the crop has been acclaimed to be highly potential for the household livelihoods in the District.

The study adopted cross-sectional research design since it allows data collection for multiple variables from a representative sample with varied characteristics (Labaree, 2009; Rindfleisch *et al.*, 2008; Olsen *et al.*, 2004) to be examined at a single point in time in order to detect variable patterns of association (Bryman, 2008). The sample size was 213, estimated by using Daniel (2009) formula. Systematic sampling technique was used to obtain respondents whereby the lists for selection was obtained from the village households registers kept by the Village Executive Officers (VEOs) in the selected villages. The sampling interval

(k^{th} element) was determined using the K^{th} formula and thereafter a first observation was randomly chosen by writing the serial numbers on separate paper pieces and then folded before the random picking. Quantitative data were collected by using a household survey approach with a structured questionnaire at household level. A total of 213 copies of the questionnaire were administered to heads of household participating in sunflower production as smallholder farmers.

Qualitative data were collected using Focus Group Discussion (FGD) and Key Informant Interview (KII). A total of seven (7) KIIs were conducted with key informants (technical and administrative personnel) selected basing on their knowledge on sunflower cultivation and livelihood outcomes sustainability. At the village level some of the VEO and Village Agricultural Extension Officers (VAEO) were involved in the interviews whereas at the District level, some members of the District Community Development Office as well as District Agricultural and Livestock Development Office were interviewed. Five FGDs were conducted with smallholder farmers (One FGD in each village) which provided information about sunflower cultivation experience, livelihood status and chances of livelihood outcomes sustainability, among others. Qualitative data were transcribed, categorised, coded (open coding and axial coding) and thereafter grouped into themes pertaining to livelihood outcomes sustainability. Then data were analysed by using constant comparison technique.

Livelihood outcomes sustainability among households was measured by developing a Livelihood Outcomes Sustainability Index (LOSI). The LOSI indicators were customised from the Sustainable Livelihoods Framework (DFID, 2001) reflecting the typical assets used in rural livelihood analysis as reflected in the assets pentagon (natural, social, human, physical and financial). Some of the indicators included the ability to sustain household dietary requirements; increase the number of household assets; maintain household financial status; maintain and increase land owned; cover medical expenses, school fees and other school expenses. The indicators were weighted then summated into total scores to determine the maximum and minimum score.

$$zind_j = \frac{indicator_j - \min j}{\max j - \min j} \dots\dots\dots (1)$$

Once the standardised indicators for each household were determined, the composite livelihood outcomes sustainability index for the respective household was constructed by customising the formula of Rahman and Akter (2010) where w are the weights determined by the number of indicators used to construct each index. The weights vary between households because of the variation in the number of indicators at the household level. The customisation was done in the determination of cut-off points whereby in this study computed median was used. The classification of the scores in the index was based on the computed median (5.0) as a cut-off point.

$$LS = \frac{\sum_{i=1}^n w_i HLS_i}{\sum_{i=1}^n w_i} \quad (\text{Rahman and Akter, 2010}) \dots\dots\dots (2)$$

The indices interpretation were categorised into levels since the households are endowed with resources differently that give rise to disparities which affects their ability to endure livelihood shocks and sustain their livelihoods divergently (Rapsomanikis, 2015). Also, Fratkin (2013) observed that households of different wealth levels may view livelihood vulnerabilities and risks differently which has an implication towards livelihood sustenance.

Table 1: Index category and levels of livelihood outcomes sustainability

Index Value	Index Category	Sustainability Level
00	Poor	Poor Sustainability
1.0 – 4.9	Bad	Low Sustainability
5.0	Satisfactory	Moderate Sustainability
5.1 – 9.0	Good	High Sustainability

Source: Customised from Khodijah (2014)

The socio-economic factors were scaled by using Principal Component Analysis (PCA) in order to get the most prevalent factors while observing the principle of parsimony (Occam's razor). The extracted factors included age of household head, household size, household head sex, household head education level, household asset index and household savings. Thereafter, in order to determine the influence of the extracted factors on livelihood outcomes sustainability a multiple regression model was used. The model was selected because the dependent variable (livelihood sustainability) was a continuous measured using an index. The assumptions of the model among others include sample size adequacy, outliers, multicollinearity and normality (Pallant, 2011).

Sampling assumption was tested by using the formula proposed by Tabachnick and Fidell (2007) that the minimum sample size is given by; $50 + 8(m)$ where "m" is the number of variables and at least there should be 20 responses per variable. Thus, with 6 independent variables in the model (Table 3) a minimum sample size 90 ($50 + 8(6)$) was required. For this analysis the study made use of a sample of 213 sunflower smallholder farmers. Thus, the assumption was satisfied. Normality was tested by using the Kolmogorov-Smirnov and Shapiro-Wilk test of normality. Some variables were transformed using natural logarithm function (Ln) and both test yielded an insignificant p-value ($p > 0.05$) indicating that there was a normal distribution.

Outliers were checked for both dependent and independent variable through obtaining the standardised residual values and none of them had values above 3.3 or less than -3.3 as

recommended by Tabachnick and Fidell (2007) thus, there were no outliers. Multicollinearity was tested to determine whether there was a strong correlation between independent variables that would have caused problems when assessing individual importance of each independent variable. Pallant (2011) and Field (2009) assert that an inter-correlation of variables ranging from 0.80 and above signals a multicollinearity problem. Results in Table 2 shows that none of the variables inter-correlation equals or exceeds 0.08 thus; there is no evidence for multicollinearity.

Table 2: Variables correlation matrix

	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆
X ₁		0.332	- 0.097	0.230	0.002	0.224
X ₂			- 0.097	0.324	0.048	0.115
X ₃				0.006	0.384	0.286
X ₄					0.030	0.070
X ₅						0.589
X ₆						

The multiple regression formula is given as:

$$y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + \dots + b_6x_6 + \varepsilon \quad (3)$$

Where:

Y	=	livelihood outcomes sustainability index scores
a	=	constant or intercept of the equation
b ₁ ...b ₆	=	regression coefficients
e	=	error term

Table 3: Description of Model Variables

Variable	Definition and Unit of Measurement
Dependent Variable	
LOS	Index Scores
Independent Variables	
AGE (X ₁)	Age of household head (years)
HHS (X ₂)	Household size (number of household members)
HHG (X ₃)	Household head sex (1=Male; 0=Female)
EDU (X ₄)	Household head education Level (years of school)
HAI (X ₅)	Household asset index (index scores)
THS (X ₆)	Household cash savings (shillings)

3.0 FINDINGS AND DISCUSSION

3.1 Livelihood Outcomes Sustainability Status among Households of Smallholders

The study established the status of perceived levels of livelihood outcomes sustainability among smallholder farmers in terms of poor, low, moderate and high basing on the developed index. Findings in Table 4 show that the majority of smallholder farmers' households (54%) fall under low livelihood outcomes sustainability status. This implies that smallholders' household with lower level of livelihood outcomes sustainability did not generate enough abilities (such as household income and assets) to enable them withstand future livelihood shocks basing on vulnerability context. As such, Rapsomanikis (2015) and Kawamala (2012) observed that most of smallholder farmers earn low incomes which may not be sustainable since they are used immediately to cover for household requirements and very little is saved to cover for future needs. Thus, they have low propensity to save (Girabi and Mwikaje, 2013) since what they earn from agriculture largely ends up covering subsistence needs.

Table 4: Levels of livelihood outcomes sustainability among households (n=213)

Levels	Frequency	Percent
Poor Sustainability	42	19.7
Low Sustainability	115	54
Moderate Sustainability	20	9.4
High Sustainability	36	16.9

Smallholder farmers' households that were categorised into high level of livelihood outcomes sustainability were 16.9%. This implies that some households with high level of livelihood outcomes sustainability had chances to withstand livelihood shocks and address household needs since they generated better abilities from their economic activities. Similar results were noted during interview where the DALDO as a key informant illustrated that sunflower smallholder farmers are more favoured with weather conditions of Iramba since sunflower is drought resistant hence, they have better chances of productivity and higher incomes even with drought weather conditions compared to other crops' farmers who highly depends on less resistant crops in some parts of Iramba District." (Iramba DC Offices-March, 2017). Thus, basing on DALDO's observations, households of sunflower smallholder farmers had higher chances of livelihood outcomes sustainability unlike their counterparts.

During a focus group discussion at *Kitukutu* Village (March, 2017), it was found that among households with high livelihood outcomes, some were able to use household incomes earned from sunflower production to diversify income generating activities. Several members pointed out that *"...income from sunflower production has enabled me to have alternative sources of income through investing into small businesses such as motorcycle (bodaboda) and retail shops..."* this was substantiated by the fellow group

members who happened to have similar observations in their households/neighbouring households. Theoretically, the SLA holds that diversification of livelihood strategies would guarantee improved livelihood outcomes (Chambers and Conway, 1991; DFID, 2001; Krantz, 2001) which increases chances of livelihood sustainability among households. Thus, households with diversified income generating activities stood better chances for livelihood sustainability.

3.2 Socio-economic Factors Influencing Chances of Livelihood Outcomes Sustainability

The socio-economic factors potentially influencing livelihood outcomes sustainability were mostly derived from the pentagon of assets/capital in sustainable livelihood framework. The factors were subjected to factor analysis (using principal component analysis) to scale out the most apparent factors in the study before they were subjected to inferential analysis to determine the significance of the influence.

Initially, the suitability of data for factor analysis was assessed using Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy as well as Bartlett's test of sphericity. Results in Table 5 show a KMO measure of 0.761 indicating a considerable value of sampling adequacy for factor analysis that is beyond the cut-off point of 0.5 (Kaiser, 1970; Kaiser 1974). The Bartlett test of sphericity had a significant value ($p = 0.000$) which supports the factorability of the correlation matrix and thus, factor analysis was appropriate (Pallant, 2011).

Table 5: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.716
Bartlett's Test of Sphericity	Approx. Chi-Square	873.680
	Df	91
	Sig.	0.000

Thereafter, factor extraction was done by identifying factors that can be used for further analysis. Factors were extracted basing on the Eigen values of 1 and above as recommended by Field (2009) and Pallant (2011). The Eigen values associated with each factor show the variance explained by that particular linear component. Table 6 presents the Eigen values associated with each factor before extraction and after extraction. Before extraction there were 14 factors and afterward basing on the Eigen values only 6 factors were retained which explained a total of 72.210% of the variance.

Table 6: Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.898	20.697	20.697	2.237	15.976	15.976
2	2.052	14.655	35.352	2.127	15.196	31.172
3	1.664	11.888	47.241	1.690	12.071	43.243
4	1.431	10.220	57.461	1.608	11.488	54.731
5	1.054	7.532	64.993	1.356	9.687	64.418
6	1.010	7.217	72.210	1.091	7.792	72.210
7	0.799	5.707	77.917			
8	0.753	5.375	83.292			
9	0.679	4.850	88.143			
10	0.473	3.379	91.522			
11	0.460	3.289	94.811			
12	0.392	2.800	97.611			
13	0.212	1.513	99.124			
14	0.123	0.876	100.000			

Extraction Method: Principal Component Analysis.

a. Type of Respondents = Sunflower Smallholder Farmers (n = 213)

Once the number of components was identified, the study went further to determine the patterns of loadings for easy interpretation. The oblique rotation was chosen and factors with loadings of 0.3 and above were retained as observed by Pallant (2011) that factor loadings should be higher for constructs they are mean to support in comparison with other factors. Hence, from the analysis a total of 6 factors namely household head age, household size, household head sex, household head education, household asset index and total household savings were extracted for multiple regression analysis to determine their influence on livelihood outcomes sustainability among households.

In order to capture the influence of socio-economic factors on livelihood outcomes sustainability among smallholder farmers the multiple regression model was adopted. Preliminary results (Table 7) shows the overall fit of the model was statistically significant ($p = 0.000$) which means the model had enough explanatory power to predict the influence of socio-economic factors on livelihood sustainability. Among the predictor variables, household size, household head education, household asset index and total household savings were significant ($p < 0.05$) while sex and age of the household head were not significant towards influencing households' livelihood outcomes sustainability ($p \geq 0.05$). However, among the significant variables, household head education and household asset index had the highest standardised coefficients thus, making the strongest contribution to explain the dependent variable when the variance explained by other factors in the model is controlled for (Pallant, 2011).

The influence of household age produced insignificant results findings in Table 7 ($\beta = -0.015$; $t = -0.634$; $p = 0.527$) indicating that the age of the household head had no significant influence on chances of household livelihood outcomes sustainability. Findings imply that households headed by those with low age (youth) are likely to sustain their livelihood outcomes since they are less experienced in sunflower cultivation but also their

household incomes might be low as a result of limited control over livelihood resources. Also, on the other perspective it implies that as individual ages they become less productive in terms of labour power which is critical when it comes to on-farm and off-farms activities aiming at improving household livelihoods. This affects the chances of livelihood outcomes sustainability as the household head's efforts to engage into productive socio-economic activities in the rural settings are impaired with age limitations, thus they become dependants.

Household size produced significant results ($\beta = 0.041$; $t = 0.642$; $p = 0.021$) indicating that the size of the household had a significant influence on livelihood outcomes sustainability among households. Findings imply that households with more members were better off in terms of livelihood sustainability as it increases the labour power while at the same time reduces hired labour expenses which allows the household to use the money for other household needs. These results in particular support the assumptions of the sustainable livelihood approach that utilisation of human capital/asset (labour power and skills) among others (natural, social, financial and physical capitals/assets) is critical for sustenance of household livelihood outcomes. This was also illustrated during FGD whereby members agreed that the household size matters when it comes to production activities (particularly agricultural based) since household members serve as manpower (source of labour). Thus, households with more members of active labour age had more chances of sustenance since they can be more productive unlike those with fewer members of active labour age (Ulemo-March, 2017). However, it should be noted that sometimes large household size has implications if the dependency ratio is high compared to the livelihood assets (capitals).

Table 7: Multiple regression results on socio-economic factors influencing livelihood outcomes sustainability

Variables	Unstd. Coefficients		Stand. Coeff	t	Sig.	VIF
	B	S. E	B			
(Constant)	2.203	0.410		5.378	0.000	
Household Head Age	-0.005	0.008	-0.041	-0.634	0.527	1.67
Household Size	0.041	0.064	0.041	0.642	0.021	1.57
Household Head Sex	-0.014	0.186	-0.004	-0.077	0.939	1.03
Household Head Education	0.187	0.061	0.172	3.087	0.002	1.25
Household Cash Savings	7.641E-9	0.000	0.004	0.054	0.019	1.16
Household Asset Index	0.153	0.053	0.174	2.886	0.004	1.30

Household head sex was one among the insignificant results ($\beta = -0.014$; $t = 0.186$; $p = 0.939$) indicating that whether the household head was a male or female it had no influence on livelihood outcomes sustainability at household level. Findings seem to imply that male and female headed households had no significant differences ($t = -0.077$) in terms of livelihood sustenance however, on the contrary, due to cultural settings male headed households were more favoured in terms of resources and thus, they had higher chances for livelihood sustenance.

Talking about the aspect of male dominance, a key informant who is a WAEO at Ulemo Ward pointed out that “...*due to cultural norms and beliefs most of the agricultural productive resources such as land, tools and oxen are dominated by male...even in some female headed household you will find the male in-laws poaching productive resources of what is left to the widows...*” (Ulemo-March, 2017). This was also observed by Ayoola *et al.*, (2012) who reported gender inequalities in farmers’ access to adequate productive resources such as land, credit, agricultural inputs, extension services and appropriate technology which results in relative inefficiencies.

Education level of household head also had a significant influence ($\beta = 0.187$; $t = 3.087$; $p = 0.002$) meaning that level of education statistically has a significant influence on livelihood sustainability. Thus, findings in Table 7 imply that as the head of household becomes more literate the household has better opportunities for livelihood sustenance as he/she will be more aware to formal and informal livelihood opportunities. In the study area most of household heads (59.2%) had primary education followed by 28.0% with ordinary secondary education. This shows that most of the respondents were literate which influences them to participate into production activities in order to improve household livelihoods. This is due to their awareness on better production techniques of which according to Brown *et al.* (2006) it has an influence towards guaranteeing higher yields and substantial household incomes as well as livelihoods.

Accumulation of household assets also had a significant influence ($\beta = 0.153$; $t = 2.886$; $p = 0.004$) on chances of livelihood outcomes sustainability among households. Results imply that possession of household assets highly influences chances of livelihood sustainability compared to other factors (as it has the highest standardised coefficient). Also an increase in household asset ($\beta = 0.153$) would result in increased influence on livelihood sustainability. This is consistent with assumptions of the sustainable livelihood approach that accumulation and effective utilisation of livelihood assets is critical for achievement of livelihood outcomes and chances of livelihood sustenance. As such, findings indicate that household assets such as owning a house, in-house assets and land for production increased the chances for livelihood outcomes sustainability to a household.

4.0 CONCLUSION AND RECOMMENDATIONS

Households of most of the smallholder farmers were categorised into lower levels of livelihood outcomes sustainability with a few in higher level. It was evident that sunflower cultivation plays an important role towards chances of livelihood sustainability. Also, among the contributing socioeconomic factors; accumulation of household assets, household head age and education level were found to highly influence livelihood outcomes sustainability. However, household head sex and age seemed to have insignificant influence. Provided that most households had lower levels of livelihood sustainability, it suggests that they were not able to withstand livelihood shocks and stresses due to limited capabilities. Thus, it is recommended that households should consider diversifying their economic activities. This can be done through collective efforts by the smallholder to access small credits from microfinance institutions and share investment into small businesses such as retailing of sunflower by-products (seed cakes and cooking oil). Some findings had indications of male dominance of productive resources

such as land and agricultural tools. Based on that the study recommends the stakeholders involved in promoting livelihood improvement and sunflower production to address the outdated norms and traditions. This can be done by promoting dialogues in the community with a view to change biased norms that discriminate women ownership and control of productive resources.

5.0 THEORETICAL REFLECTIONS

Theoretically, the sustainable livelihood approach hardly made reflections on the trajectory of how households can graduate from one livelihood outcome sustainability status to another, particularly the livelihood transformation pathway. Also, it should be noted that while the sustainable livelihood approach maintains sustainability as a focal concept in the evaluation of household livelihoods, the mechanism underlying such development path is not explicitly provided as the concept is conceived to be implicit. Taking this into consideration the study developed an index to provide a mechanism on how the sustainability can be measured and qualified across households since they are endowed differently which influences their chances of sustenance. The study furthermore availed a number of socio-economic factors which are important towards households' graduation from one livelihood outcome sustainability status to another as a result of an increase or manipulation of one or more factors.

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THE INFLUENCE OF SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES ON FINANCIAL LITERACY AMONG ADULTS IN DAR ES SALAAM

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ABSTRACT

Financial literacy helps an individual to make rational financial decisions on a day to day basis. Being financially literate on issues such as insurance, inflation, savings and financial markets helps an individual to plan for retirement, risk diversification and investment. The aim of this research was to study the influence of socio-economic and demographic variables (educational level, gender, income and age) on financial literacy level among adults. The study was conducted in Dar es Salaam City in Tanzania. It was necessary to conduct this study to improve understanding of the influence of socio-economic and demographic variables on financial literacy within the adult population. It was equally important to conduct the study because the findings would be beneficial to different stakeholders such as financial advisors, educators in the training programme of the National Financial Education Framework (NFEF) currently running in Tanzania, policy makers and academicians. It would also serve to build public awareness on financial literacy. Primary data were collected using questionnaire from 399 respondents. Influence of socio-economic and demographic variables on financial literacy was tested using binary logistic regression. The study found that age and education significantly influence financial literacy level; it was also found that gender and income do not significantly influence financial literacy level. The study findings have significant implications for individuals, policymakers and educators in improving individuals' financial literacy level which, in turn, helps to attain financial inclusion among the poor. The study also contributes to the literature concerning financial literacy particularly in the Tanzania setting.

Key words: Financial literacy, financial decisions, socio-economic variables, demographic variables, financial inclusion, Tanzania.

1.0 INTRODUCTION

Literature has described financial literacy as an important tool to address complex financial decision. Today's world is exposed to an ever-changing financial environment. There are constant changes of inflation, exchange rates, banking regulations, financial markets to mention but a few. This requires an individual to have enough financial literacy on how to deal with these changes in order that he can make rational decisions (Hung et al. 2009; Yildirim *et al*, 2017). Moreover, studies indicate that, there is a positive correlation between the financial literacy that an individual possess and the level of financial decisions they undertake (Almenberg & Dreber, 2012; Van Rooij *et al.*, 2007, 2011 and Amoah, 2016). With enough knowledge in financial matters, individuals will be able to rationally plan their expenditure, plan their investment and plan for their retirement (Raijas, 2011; Yildirim *et al*, 2017). Through proper planning in financial matters individuals will ultimately increase their wellbeing. De Bruin *et al.* (2007); Jullisson *et al.*(2005) and Stanovich & West (2008) argue that not all financial decisions can be addressed basing on experience. The financial decision to save for a child's school fees in the next academic year might be based on past experience. However, some decisions are complex by nature and demand enough financial literacy to undertake. Decisions such as those regarding risk diversification, investment in financial securities and retirement planning require enough financial literacy. According to Amoah (2016) these complex decisions can be executed perfectly, either by an individual with enough financial literacy or by consulting financial experts at a cost. Studies also indicate importance of financial literacy in reducing the poverty level in a country. Studies have confirmed that financial illiteracy has been the stumbling block to financial inclusion. The financial inclusion is the most important step in reducing poverty as per Sustainable Development Goal (SDG) Number One (The World Bank, 2014).

Financial literacy is a blend of important elements. Being financial literate implies that an individual has financial knowledge, good financial attitude and rational financial behaviour (OECD, 2013). The first element is financial knowledge which captures understanding of financial concepts. Some of the financial concepts include inflation, interest rate and time value of money. The second element is financial behaviour which addresses the actual individual decisions making and practices. These decisions might include actual savings and expenditures. The third element is financial attitude which deals with values and beliefs on particular financial practices. Some people might have different beliefs in investing in different financial products. Therefore, it is important to have adequate financial literacy to manage well personal financial matters. Financial literacy improves people's wellbeing (Raijas, 2011). It gives confidence in decisions (Seyaram, 2015). It also helps in selecting viable investments among alternatives (Gaberlavage, 2009; Lazar, 2016); it boosts effective involvement in financial markets (van Rooij, Lusardi, and Alessie, 2007). Moreover, it helps to develop good retirement plans (Lusardi, 2014). Financially illiterate individuals are not likely to achieve benefits of financial literacy. Therefore the well-being of the financially literate is greater than that of their financially illiterate counterparts.

Many studies have been conducted on financial literacy especially in the past two decades. Some of the literary works include studies of Lusardi & Mitchell (2011), Atkinson & Messy (2012) and Amoah (2016). There is a low level of financial literacy in the world(World Bank, 2014; Lusardi, 2014; and Atkinson & Messy, 2012). Comparatively,

developed countries have a relatively higher level of financial literacy than developing countries (Lusardi and Mitchell, 2006). On top of that, studies associate financial literacy with socio-economic and demographic variables. Most notably socio-economic and demographic variables studied include age, education level, income level, gender, race and parental influences (Wingfield, 2016). Yildirim (2017) studied age, education level and income level as determinants of financial level among employees. Lusardi *et al.* (2010) studied financial literacy among students. Gender, race, education level, family background, peer characteristics and cognitive abilities were used as determinants of financial literacy. Moreover, Jeyaram (2015) used race and gender to study financial literacy among students of different nationalities; whereas, Lazar (2016) conducted a study education and age as determinants of financial literacy among women.

Literature survey indicates that, there is scant number of studies in the area of financial literacy among the adult population in sub-Saharan Africa, particularly Tanzania. Moreover, the studies which have been conducted in the same topic ended up with conflicting results in different dimensions (Lusardi, 2015; Wingfield, 2016). Conflicting results emerge basing on which factors significantly influence financial literacy. Moreover, the impact of each factor which influences financial literacy has been equally dissimilar. In the study by Yildirim (2017) he noted education level and income level as the most important determinants of financial level among employees. Lusardi *et al.*, (2010) identified gender as the most important factor to determine financial literacy among youth. Moreover, Jeyaram (2015) identified gender and race being important determinants among students of different nationalities. Lazar (2016) saw education and age as the most important determinants of financial literacy among women. These divergences in findings may happen due to differences in social, cultural and economic condition of countries. It might also be due to differences in the studied populations, disparities between the different countries regarding, for instance, their education systems, and also differences due to the time at which the research was conducted. It is expected that people from countries with well-developed financial markets and banking systems, will be more financially literate than those from underdeveloped markets and banking system. Likewise, those who come from families in which parents are financially literate are likely to be the same than those coming from financially illiterate families.

Tanzania, in response to the low financial literacy among its people, launched the National Financial Education Framework (N-FEF) in 2016. The main purpose for its establishment was to boost financial literacy among individuals. Financial illiteracy among individuals was the stumbling block in efforts to increase financial inclusion in the country as advocated by FinScope (2013). These initiatives came to supplement efforts of financial inclusion initiatives which are implemented under The National Financial Inclusion Framework (NFIF). The NFIF specifically aims at increasing financial inclusion to meet Universal Financial access by 2020 as advocated by The World Bank. Despite the big effort undertaken by the government to boost financial literacy, no study has been done specifically on the influence of socio-economic and demographic variables on financial literacy among adults in Tanzania. So, to our knowledge, this is one of the focused studies in attempting to fill the gap.

It was therefore necessary to conduct this study in the context of Tanzania to improve understanding on the influence of demographic characteristics on financial literacy among adult population. Again, it was equally important to conduct this study because the findings would be beneficial to different stakeholders such as financial advisors, educators who deal with financial inclusion in Tanzania, policy makers, academicians; it will also help create public awareness on financial literacy. Generally, the study aimed at addressing empirically the influence of socio-economic and demographic variables of gender, education, income and age on financial literacy among adult population in Dar es Salaam, Tanzania.

2.0 REVIEW OF EMPIRICAL STUDIES

Many studies have tried to measure financial literacy in relation to socio-economic and demographic variables among different groups in a population. Literatures indicate many studies have been conducted in developed countries. By contrast, very few studies have been conducted in developing countries especially Sub Saharan Africa. Yildirim (2017) measured financial literacy among employees in Turkey. Lusardi *et al.*, (2010) studied financial literacy among youth population in United States. Jeyaram (2015) and Wingfield (2016) conducted a study on financial literacy among students in Malaysia and South Africa respectively whereas, Lazar (2016) conducted financial literacy study among earning women population in Pondicherry, India. Sharma and Dixit (2017) conducted same study among adult population in Mumbai, India. Amoah (2016) also conducted same study among African-American population groups in the United States. The variables which have been mostly studied are gender, race, income level, education and age; other variables include marital status, occupation and parent education level. The choice of variables used in those studies depended upon the nature of the study.

Studies have been done on the influence of gender on financial literacy. One of the studies is Lusardi & Mitchell (2011) which was undertaken in the United States. Atkinson & Messy (2012) studied 14 countries including Armenia, the Czech Republic, Estonia, Germany, Hungary, Ireland, Malaysia, Norway, Peru, Poland, South Africa and the United Kingdom. Brown & Graf (2013) conducted study in Switzerland on the influence of gender on financial literacy level. All these studies indicate that men have higher financial literacy level compared to women. By contrast, these studies were preceded by a study by Jorgensen in 2007. Jorgensen (2007) found that gender is not a significant variable in explaining financial literacy especially among students.

Influence of age on financial literacy has also been studied by many scholars. Agarwal *et al.* (2009) did a study on how individuals make financial decisions over a life cycle. Also Scheresberg (2013) studied relationship between age group and financial literacy levels. Both studies reveal that individuals in the age group between 30 and 40 years who are in the middle of their life cycle have higher financial literacy compared to those under 30 years and older than 40 years. However, a study done by Koenen and Lusardi (2011) found those aged between 36 and 50 were more financially literate compare to other age groups.

Marital status has equally been seen as an important factor in determining financial literacy. Studies indicate married individuals have higher literacy levels compare to singles. These were the findings from Brown and Graf (2013) and Calamato (2010). They conducted

studies on correlation between marital status and financial literacy levels in the United States and Switzerland respectively. Moreover, (Calamato, 2010) added that there was a positive correlation between married skilled labourers and financial literacy levels and negative correlation between married unskilled labourers and financial literacy levels.

Studies indicate that income level has an impact on determining financial literacy. Hastings and Mitchell (2011) studied how financial literacy shape retirement wealth and investment behaviour in Chile. They found income level has a positive relationship with financial literacy level. Atkinson and Messy (2012) who studied determinants of financial literacy in 14 countries replicated same results. They also found income level significantly influence financial literacy. Conversely, Lazar (2016) found that income level has no influence on the financial literacy level among women population in India.

Higher financial literacy levels are found in individuals with higher education levels and greater access to financial information. This was according to Lusardi and Mitchell (2011) on their study on financial literacy and retirement planning. They posited that, those who spent more years in education had an upper hand in responding to questions regarding financial literacy compared to those who had less years of education. However, previous study done by Chen and Volpe (1998) who studied financial literacy among college students in the United States had opposite findings compared to the study by Lusardi and Mitchell (2011). They found that regardless of education level as measured by number of years spent in education among college students, the majority of them had inadequate knowledge on financial literacy, particularly the aspect of investment and risk diversification.

From this literature review one can identify differences in findings. The base of difference lies on different angles. There are findings differences depending on the studied populations. Some studied students' population, others focused their study on women while still others focused on adult population. There is also a disparity in findings between the different countries on the same study. This might be the case as countries differ for instance in their financial and education systems. Differences in findings also happen due to the time at which the research was conducted. Financial illiteracy is not a permanent situation. It may improve with efforts and time. The current study was conducted on the influence of socio-economic and demographic variables on financial literacy among adult population in Dar es Salaam, Tanzania.

3.0 METHODOLOGY

3.1 Study Area and Data Sources

The research was conducted in Dar es Salaam, Tanzania which is the largest city in the country in terms of population. Financial literacy, Socio-economic and demographic data were used in this study. Primary data were collected using a questionnaire tool. The same tool was used in the work of Sharma and Dixit (2017), Lazar (2016) and Amoah (2016). Data in regard to demographic (population of adults who are 15+ years) were sourced from several publications of the National Bureau of Statistics (NBS).

3.2 Sampling and Sample Size

Non probability convenience sampling was used to get respondents to participate in the study. The same sampling technique was adopted by financial literacy studies done by Sharma and Dixit (2017), Lazar (2016) and Amoah (2016). The current population of Dar es Salaam in 2018 is estimated to be 6,041,000. Moreover, it is estimated that the population of adult age in the city (i.e. above 15 years) is 58% – that is to say the estimated adult population in Dar es Salaam is around 3,503,780. Sample size was calculated from the estimate of Dar es Salaam adult population. Sample size formula according to Yamane (1967) gives;

$$n = \frac{N}{1 + N(e)^2}$$

N is population size, n is sample size, e is margin of error which is 5%

$$n = 3,503,780 / (1 + 3,503,780 (.05^2))$$

$$n = 399$$

The sample size for this study was 399 individuals.

3.3 Data Gathering Tools and Methods

Questionnaires were applied on a face to face modality through home visits and in public places. Consent from each respondent was highly considered so as to adhere to research ethics. Those who were willing to participate in the study were involved; altogether 399 questionnaires were distributed to the respondents in Dar es Salaam region. Those who agreed to participate were all interviewed and all 399 questionnaires were filled and returned.

3.4 Measuring Financial Literacy

Measuring financial literacy, the study adopted OECD (2013) recommendations which comprise three elements in measuring financial literacy. These are financial knowledge, financial behaviour and financial attitude. The variables measured and scored in the questions included inflation, insurance, credit, shares, bonds, risk, return, interest rates, government securities, exchange rate and time value of money. There were 30 questions in each questionnaire that were put to each respondent. Each correct answer was awarded one mark and zero mark for incorrect response. Questions were marked out of 30. Correctness of the answer was based on knowledge in financial literacy variables. The socio-economic and demographic variables selected and used for the study included education level, age, income level and gender. In many studies such as Sharma and Dixit (2017), Lazar (2016) and Amoah (2016) these were found to be the most common variables used. Generally, the questionnaire was brief but comprehensive to ensure that it was convenient to the respondents and capture all important elements in measuring financial literacy. The instrument had two sections; Section One involved socio-economic and demographic characteristics of respondents and Section Two dealt with financial literacy questions.

3.5 Data Analysis

Primary data from this study were analysed quantitatively by using statistical methods. Statistical Package for Social Sciences (SPSS) version 22 was used. The study had

categorical (education and gender) and continuous (income and age) predictor variables and dichotomous outcome variable (high/low financial literacy). The nature of these variables necessitated use of parametric test of binary logistic regression (Field, 2009). To maintain consistency and fairness in assessment among respondents, no scientific calculators and other calculating tools were provided. Moreover, since there is no unique well established index to be used in measuring financial literacy (Wingfield, 2016), the researcher opted to use median to classify financial literacy into high and low level as adopted by Sharma and Dixit (2017). The median score was used to rank dichotomous outcome variables of financial literacy. Those who scored above the median score were grouped into high financial literate group, whereas those who scored below median score were grouped into low financial literacy.

Before running the binary logistic model it was important to test its assumptions. Once assumptions are met, the researcher can proceed with the analysis. First, Omnibus tests of model coefficient was run to check if predictor (demographic) variables really predict the outcome (financial literacy level) variable. The results are found in table 1 that the sig. (p) is .000, which is less than conventional .05; this indicates at least one of the predictor variables is statistically significant with respect to predicting outcome variable (high/low financial literacy level).

Secondly, in model summary Nagelkeke R square was calculated. Nagelkeke R square indicates the extent to which overall predictor variables (socio-economic and demographic) explain the variance in outcome variable. It was found to be .645. This means the model accounts for 64.5% of variance in financial literacy level. It is an adequate explanation as figure is not far from one.

Equally, Hosmer and Lemmestow test was run to test goodness of the model fit, which indicates how well data fits the model, the results indicates goodness of the fit (Table 3) as sig. p value was .759 which is above .05 as a convention. (Field, 2009)

Table 1: Omnibus Tests of Model Coefficients, model summary and Hosmer and Lemeshow Test results

Omnibus test		Chi-square	Df	Sig.
Step 1	Step	45.798	9	.000
	Block	45.798	9	.000
	Model	45.798	9	.000
Model summary				
Step 1	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square	
	506.910 ^a	.508	.645	
Hosmer and Lemeshow Test				
Step	Chi-square	Df	Sig.	
1	4.991	8	.759	

3.6 Limitations of the Study

Limitations of the study stem from the fact that, it was assumed respondents would give correct responses to the best of their knowledge. However, the researcher understands money related issues involve emotional attachments which can cause respondents to give unrealistic responses. Also, the study covered one region out of more than 20 regions in the country. Therefore care should be taken when generalization is done over the entire country.

4.0 RESULTS AND DISCUSSIONS

This part presents and discusses the results of the study. It starts by presenting descriptive results and then presents and discusses binary logistic regression results.

4.1 Descriptive Results

Generally, the median score was found to be 14 out of 30 whereas mean score was 15.23. This is to say, respondents who scored below median score of 14 are grouped as low scorers hence financially illiterate group and those scored above median score are high scorers and hence categorized as financially literate. The majority of respondents among all 399 were financially illiterate as shown in the descriptive statistics in Appendix 1.

4.2 Binary Logistic Regression Results

Binary logistic regression results of analysis are as presented in Table 2.

Binary logistic regression was run to test if socio-economic and demographic variables (gender, education level, income and age) of 399 respondents in Dar es Salaam predict their financial literacy levels. Binary logistic regression indicated that, education level significantly predicted the financial literacy levels at 0.027 significance level, 6 degree of freedom. Those who attended higher education such as college and university compares to other education levels were found to be more financially literate than those with lower level of education. This result is consistent with the findings of Lazar (2016), Potrich *et al.*, (2015) and Sharma and Dixit (2017). They all together found education level was significant predictor of financial literacy level and those with higher level of education were more financially literate than those with lower level of education.

Moreover, we reciprocated results in Table 2 to ease interpretation and discovered that: respondents who had university or other higher education were 38 times more likely to be (high) financially literate compared to respondents who had no formal education ($p < .05$, 95% CI .003, .218). Those respondents who had university or other higher education were 9 times more likely to be financially literate compared to respondents who had incomplete primary education ($p < .05$, 95% CI .014, .792). Respondents who had university or other higher education were 13 times more likely to be (high) financially literate compared to respondents who had completed primary education ($p < .05$, 95% CI .015, .379) and respondents with university or other higher education were 7 times more likely to be financially literate compared to respondents who had completed primary and attended post primary technical training ($p < .05$, 95% CI .028, .58). Whereas, the respondents who had university or other higher education were 6 times more likely to be financially literate compared to respondents who had incomplete secondary education ($p < .05$, 95% CI .033,

.701), for those respondents who had university or other higher education they were 2 times more likely to be financially literate compared to respondents who had completed secondary education ($p < .05$, 95% CI .161, 1.083).

Results regarding influence of gender on financial literacy show that, gender significantly did not predict the financial literacy levels. Gender was not found to be a viable predictor when it comes to predicting on financial literacy level. ($p = .220$, 95%, CI .484, 1.182) This is in line with the findings of Sharma and Dixit (2017) but inconsistent with the findings of Lusardi (2015) and Wingfield (2016) who found women were less financially literate compared to men. The binary logistic model indicated that income level significantly did not predict the financial literacy levels. Income level was not found to be a viable statistically significant predictor when it comes to predicting on financial literacy level ($p = .154$, 95%, CI 1.00, 1.00). This finding agrees with the work of Lazaar (2016) and Sharma and Dixit (2017).

Moreover, the model results show that age significantly predicted the financial literacy levels .020 significant level, 1 degree of freedom (s Table 2) especially with the age group of 29 to 50 years. This is partly consistent with the findings of Lazar (2016) who found age group of 30-40 years to be more financially literate than below and above this years' group. Moreover Sharma and Dixit (2017) had the same finding that age is an influential statistical significant predictor of financial literacy level.

Table 2: Variables in the Binary logistic regression equation

								95% C.I.for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Edu			14.240	6	.027			
	edu(no formal educ)	-3.635	1.077	11.386	1	.001	.026	.003	.218
	edu(incomplete primary)	-2.268	1.038	4.771	1	.029	.104	.014	.792
	Edu(primary completed)	-2.598	.830	9.790	1	.002	.074	.015	.379
	edu(post primary)	-2.059	.773	7.096	1	.008	.128	.028	.580
	edu(incomplet secondary)	-1.890	.783	5.823	1	.016	.151	.033	.701
	Edu(completed secondary)	-.873	.486	3.225	1	.073	.418	.161	1.083
	Gender (male)	-.279	.228	1.501	1	.220	.757	.484	1.182
	Age	-1.900	.817	5.401	1	.020	.150	.030	.743
	Income	.000	.000	2.034	1	.154	1.000	1.000	1.000
Constant		5.862	1.906	9.455	1	.002	351.410		

a. Variable(s) entered on step 1: edu, gender, age, income.

b. Basis for model was high financial literacy

5.0 CONCLUSION AND RECOMMENDATIONS

The aim of the study was to analyse influence of socio-economic and demographic variables on financial literacy among adult population in Dar es Salaam. The study interviewed 399 people. Financial literacy questions involved three key group of questions

as recommended by OECD (2013) in measuring financial literacy. These are financial knowledge, financial behaviour and financial attitude. By employing binary logistic model the study found that education level and age significantly influence financial literacy. That is, people who had more years of education are more likely to be financially literate than those who had few years of education. Also, the model shows that the age group between 29 and 50 years are more financially literate than the one below and above it. However, the model results show gender and income variables did not significantly influence financial literacy. That is, being male or female has nothing to do with being financially literate; on the other hand income level (earning low or high) was found to have nothing to do with being financial literacy.

The findings of this study have policy implications. This calls for country stakeholders such as government, financial advisors, academicians and politicians to make more efforts to increase financial literacy to meet the financial education framework target of 2016-2020 and finally achieve universal financial access by 2020 (UFA 2020). Moreover, financial educational programmes to promote financial literacy should be taught at primary and secondary schools as well as at university level regardless of the course taken. This will help to broaden the financial literacy to a majority of the country's population. Microfinance institutions should also run financial literacy programmes for their members or clients. Highly financially literate members will bring substantial constructive ideas to develop the microfinance institution in general and, in particular, improve their decisions on optimal use of the financial services provided.

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APPENDICES

Appendix 1: Financial literacy scores basing on socio-economic variables

			Financial literacy level		Total
			Low score	High score	
Gender	Male	Count	91	102	193
		% within financial literacy level	47.2%	49.5%	48.4%
	Female	Count	102	104	206
		% within financial literacy level	52.8%	50.5%	51.6%
Total		Count	193	206	399
		% within financial literacy level	48.4%	51.6%	100.0%
Education level	No formal education	Count	31	9	40
		% within financial literacy level	16.1%	4.4%	10%
	Some primary	Count	6	5	11
		% within financial literacy level	3.1%	2.4%	2.8%
	Primary completed	Count	51	30	81
		% within financial literacy level	26.4%	14.6%	20.3%
	Post primary technical training	Count	15	13	28
		% within financial literacy level	7.8%	6.3%	7.0%
	Some secondary	Count	12	9	21
		% within financial literacy level	6.2%	4.4%	5.3%
	Secondary completed	Count	67	112	179
		% within financial literacy level	34.7%	54.4%	44.9%
	University or other higher education	Count	11	28	39
		% within financial literacy level	5.7%	13.6%	9.8%
Total			193	206	399
Income (Tsh)	Up to 100000	Count	2	0	2
		% of Total	0.5%	0	0.5%
	100000-200000	Count	36	14	50
		% of Total	9.0%	3.5%	12.5%
	200000-300000	Count	71	48	119
		% of Total	17.8%	12.0%	29.8%
	300000-400000	Count	29	58	87
		% of Total	7.3%	14.5%	21.8%
	400000-500000	Count	43	58	101
		% of Total	10.8%	14.5%	25.3%
500000 and above	Count	12	28	40	
	% of Total	3.0%	7.0%	10.0%	
Total		Count	193	206	399
		% of Total	48.4%	51.6%	100.0%
Age (years)	18-28	Count	25	28	53
		% of Total	6.3%	7.0%	13.3%
	29-39	Count	66	76	142
		% of Total	16.5%	19.0%	35.6%
	40-50	Count	44	69	113
		% of Total	11.0%	17.3%	28.3%
	51-61	Count	34	23	57
		% of Total	8.5%	5.8%	14.3%
62 and above	Count	24	10	34	
	% of Total	6.0%	2.5%	8.5%	
Total		Count	193	206	399
		% of Total	48.4%	51.6%	100.0%

INFLUENCE OF SOCIO-CULTURAL FACTORS ON THE PERFORMANCE OF WOMEN SMALL AND MICRO ENTERPRISES IN SHINYANGA MUNICIPALITY

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ABSTRACT

While, social-cultural factors have continued to affect the business performance of women in Tanzania, the current study aimed to assess the effect of social-cultural factors on the performance of women Small and Micro Enterprises (SMEs) in Shinyanga Municipality. The study used questionnaires and interviews to collect data from 98 women in SMEs in Shinyanga Municipal. Descriptive statistics and multi- nominal logistic regression were used to analyse the data on four independent variable – namely, the role of entrepreneurial training, husband support, women mobility and poor attitude towards women. Profitability of women in SMEs financial performance has been used as dependent variable. The findings from descriptive analysis showed that more than 60% of women in SMEs in Shinyanga Municipality were found to have their husbands' support, freedom of movement to search for market, free from negative attitudes, and to have used their entrepreneurial skills for business operations. The multi- nominal logistic regression showed that social-cultural factors had a small positive relationship with profitability of women in SMEs in Shinyanga (Adjusted R-square of 0.078). It is recommended that women in SMEs in Shinyanga should be given entrepreneurial education to deal with their businesses. The other factors (husband support, attitudes over women and women mobility) were found not to be as significant to women SMEs' performance.

Key words: Social-cultural factors, Small and Micro Enterprises (SMEs), Profitability of women SMEs financial Performance.

1.0 INTRODUCTION

1.1 Background to the Study

While social cultural practises are reported as the barriers for women in running their businesses around the world (ILO, 2003; Stevenson and St. Onge, 2005; Vossenbergh, 2009; World Bank; 2013), the problem is endemic among women in Small and Medium Enterprises (SMEs) in Shinyanga Municipality as it affects their business profitability. Thus, the current study is guided by the general assumption that social cultural practises affect the financial profitability performance of women Small and Medium Enterprises. This study was conducted while the current statistics show that women in Shinyanga Municipality constitute 51.26% of the whole population (NBS, 2013).

Globally, the role of women as entrepreneurs is reported to relate to alleviation of poverty at family level; however, this will only be possible when they are set free from social-cultural barriers - including inheritance law, discriminatory property rights, poor access to credit and limited time resulting from family responsibilities (Stevenson and St. Onge, 2005). Authors report that while in developed nations women found access to business at high level of participations, this is different to developing nations whereby the ratio of participation between men and women is reported unevenly; for instance, women are underutilized at 50% unlike men at the rate of 22%. This implies that in developing nations women participation in business ventures is very limited which may be explained by different social-cultural factors.

Moreover, investing in women would bring about economic development because, unlike men, when women are empowered they usually invest directly in family health, education (Stevenson and St. Onge, 2005). What is more, the intervention of the International Labour Organization in more than 25 countries had focused on creating economic opportunities for women through Women Economic Development (WED); for instance, in Africa, the Arab states, Asia, the Pacific and Latin America the programme supported women to start and make their enterprise survive and grow (Stevenson and St. Onge, 2005).

Likewise in many developing nations, it is still reported that women have uneven access to financial services and suffer legal discrimination which is explained by the gender gap; for instance, The World Bank (2013) reports that in more than 98 developing nations' women have no access to credit or cannot borrow. The World Bank (2013), reports that the issue of both gender norms (violence against women and early marriage) and legal discrimination vary across countries. Vossenbergh (2013) emphasizes that in developing nations all efforts toward creating a good atmosphere for women entrepreneurs - including policy formulation - will remain unproductive if the gender gap in women entrepreneurship is not addressed. The researcher points out that a number of factors that are affecting women entrepreneurs are still reported in some of the developing nations, including lack of access to financial services, inadequate training, access to information, work family interface, women safety, gender based violence, lack of societal support and legal barriers and procedures. However such results pose as a methodological constraint to the problem.

In the African context, different scholars report in common some of challenges facing women as far as social-cultural norms or practices are concerned. South Africa, Ghana,

Ethiopia and Nigeria are among the selected few examples. For instance, while some of the social-cultural barriers still exist in countries like Ghana, Nigeria and Kenya, women are reported to be motivated in starting their own businesses; women in those countries were motivated to gain income for better life. However, the issue of legacy and external validation still pose a barrier to them (Benzing and Chu 2009); Secondly, while in Nigeria women are reported at higher rate to involve themselves in informal business sectors as a result of poverty, low family income, unemployment and societal discrimination, the role of financial institutions in providing loans to enable them run their businesses are still questionable (Ekpe, Mat and Razak, 2010); similarly, in South Africa, particularly in Soweto, while the apartheid legacy limited informal entrepreneurship, yet after the fall of apartheid retailing has proliferated but women have been pushed behind unlike men (Grant, 2013).

In Tanzania, micro-finance enterprises have been in place since 1990s. While there has been a tendency for growth of SMEs, women have been found to be poorly participating in such enterprises, with most of them engaging in enterprises in the informal sector (Rutasoby, 2002). Despite their attempt to run SMEs, women are still faced with inadequate education and training, lack of information, interference from their husbands in their business (Majenga *et. al*, 2014). Also, other scholar report the issue of poor infrastructure, lack of business premiseses, lack of prime space and lack of financial assistance (Jagero and Kushoka, 2011). To address the above challenges facing women SMEs in Tanzania, different strategies have been enacted as follows; ILO had entered into agreement with the Ministry of Industry and Trade (MIT) in 2013 to implement a women programme on entrepreneurship development and bridge the gap between women and men. The programme commonly known as Women Entrepreneurship Development and Gender Equality Programme (WEDGE). The Programme carried out research and field studies relating to women entrepreneurship in Dar es Salaam, Arusha and Zanzibar. A national capacity building workshop commonly known as Women Entrepreneurship Development (WED) was also held.

The Programme also included mapped out environments for women entrepreneurship and identified gaps in women entrepreneurship development (ILO, 2003). Other strategies for supporting women SMEs include included establishment of women's bank, loan scheme and agro-processing clusters sponsored by different organizations - including the Small Industry Development Organization (SIDO) (Liana and Nandonde, 2013). However, despite the effort by international organizations, micro-finance institutions and the ministry responsible for women entrepreneurship development, performance of women enterprises still face challenges in Tanzania – among them being: limited or lack of access to financial services, lack of business skills and lack of support from family (Rutasoby, 1998). Against this background, the study seeks to assess socio-cultural factors that affect women in the performance of SMEs in Shinyanga Municipality.

1.2 Statement of the Problem

Women in the Municipality of Shinyanga still face social-cultural barriers in running their Small and Medium Enterprises (SMEs). For instance, it is reported that only 3.9% of Sukuma women get support from their families in running their businesses, and that Sukuma women are subjected to weak ethnic density and low risk takers at 0.0% when

compared to Chagga of Kilimanjaro (Mashenene *et al.*, 2014). This is also supported by Maziku, *et al.*, (2014) in Dodoma and Chamwino districts whereby negative attitudes, support from husbands and women immobility are reported to be negatively significant with women business performance.

However, different scholars have been reporting on the effect of social-cultural norms of women performance in SMEs in Tanzania (ILO, 2003; Rutasobya, Allan, and Nillson, 2009; Kushoka, 2011; Majenga, *et al.*, 2014). What they share in common is that there are still some social cultural barriers which hinder women in SMEs business performance. Such social cultural barriers include: lack of access to financial services, family responsibilities, and lack of family support, family violence, early marriage, discriminatory property laws, and immobility, lack of husband support and values and customs. However, this study was motivated from the following literature gaps: firstly, while most of the studies focused on the physical attributes of women in business operation (Lambart, 2013; Liana and Nadonde, 2013) and on need assessment of women entrepreneurs (Stevenson and St. Onge, 2005), none of them established the cause-effect relationship between social-cultural factors (immobility, lack of husband support, education background and social attitudes) with women profitability in SMEs performance; secondly, while Maziku *et al.*, (2014) used similar variables with the current study to establish the relationship with women in SMEs performance, the study differ from the current study in a way that Maziku *et al.* (2014) measured the women in SMEs performance using the number of employees per year unlike the current study which used financial profitability to measure the women in SMEs performance

Generally, it can be concluded that there are limited studies in Tanzania that have covered SMEs financial performance in terms of profitability as a relative term, in the case of women in SMEs financial profitability in Shinyanga Municipality. Thus, the current study assessed the effect of social cultural factors on the profitability of women in SMEs performance measured in terms of nominal values in Shinyanga Municipal.

1.3 Study Objectives

1.3.1 General Objective

The general objective of this study was to assess the effects of socio-cultural factors in the performance of women in SMEs in Shinyanga Municipality

1.3.2 Specific Objectives

The Study specifically aimed to:

- i) Investigate the extent to which the role of entrepreneurial skills influences the profitability of women SMEs financial performance.
- ii) Establish the extent to which husband support affects the profitability of women in SMEs financial performance.
- iii) Explain how negative attitudes over women may affect the profitability of women in SMEs' financial performance.
- iv) Explain the extent to which lack of women mobility affects the profitability of women in SMEs.

1.4 Research Questions

This research answered the following questions:

- i) To what extent does the role of entrepreneurial skills influence the profitability of women in SMEs financial performance?
- ii) To what extent does a husband support affect profitability of women in SMEs financial performance?
- iii) How can poor attitudes over women affect the profitability of women SMEs financial performance?
- iv) To what extent does lack of women mobility affect profitability of women in SMEs financial performances?

1.5 Significance of the Study

When women are restricted by social-cultural practices in conducting business, this is likely to affect their livelihoods. This study provided theoretical and practical orientation toward solving the problem in a practical way it mapped the social-cultural variables which may affect the women in SMEs and serve as a framework for policy makers and other interested parties, in achieving high quality livelihood as stipulated by Sustainable Development Goals and Tanzanian Development Vision by 2025. Lastly, at the discipline level the study contributed the point that the effect of social-cultural factors do not hinder women performance in SMEs in Shinyanga Municipal because of their composition characteristics (education, and marital status), however, they still need a free access to loan and entrepreneurial education.

2.0 LITERATURE REVIEW

2.1 Definitions of Key Terms

2.1.1 Small- and Medium-scale Enterprises (SMEs)

The definition of Small-and Medium-scale Enterprises (SMEs) varies across countries depending on the country's economic status and other development factors. Thus, although there is no consensus on the definition of the term SMEs even multilateral organizations such as the United Nations (UN), the European Union (EU) the African Development Bank (ADB), the World Bank and the International Monetary Fund (IMF) lack a common definition of the term SMEs (Ubabuko, *et al.*, 2010). In most of the African states the definition of SMEs is not uniform either. Ubabuko *et al.*, (2010) explain that African countries define the term by using different indicators including: number of employees, company's turnover and assets (capital machinery), infrastructure, import and export capabilities of a particular enterprise. When Tanzania defines the term SMEs, its definition should be contextualized basing on different economic status, different development indicators, economic models and strategies of the East African Community (EAC) and the Southern African Development Community(s SADC). In that case when the term SMEs is defined, Tanzanian's government focuses on three important aspects. Which are: the number of employees, the capital invested (assets) and sector for micro, small and medium size enterprise. The kind of sectors involved here are typically none farm sectors (URT, 2002; Ubabuko, *et al.* 2010). Statistically, a micro-enterprise includes fewer than five employees (<5), small enterprise with 5-49 employees and medium with 50-99 employees and large enterprise with more than 100 employees. In case of capital machinery, the

amount set is less than five millions for micro-enterprise. The definition makes clear that other sectors such as peasant farmers, informal economic sectors and people who run low level income generating activities are not included in the definition.

The current study was undertaken with the above definition in mind. The term micro enterprises were applied to those enterprises ranging from a single person to 4 persons. In terms of capital investment micro enterprises will be defined as those with an amount below Tanzanian Shillings five millions (see Table 2.2.1). However, this study included the following women SMEs sectors: wholesale and retail shops, beauty shops, groceries, clothing and design shops, hair styling salons, pharmacy, restaurants and stationeries. They were categorized as *product* and *service* types of trade. The term sector here, excluded those informal business sectors and none farm sectors.

2.1.2 Women SMEs Performance

Performance refers to the overall activities and operations performed by women who are entrepreneurs in SMEs (Wube, 2010). The current study defined the term women SMEs performance to mean all activities relating to women ranging from financial dimension, managerial operational, growth dimension, quality of services and products, and environments.

2.1.3 Socio-Cultural Environment

In broad terms, it consists of both the social system and the culture of a people. It refers primarily to man created intangible elements which affect people's behaviour, relationship, perception and way of life, and their survival and existence. In other words, the social-cultural environment consists of all elements, conditions and influences which shape the personality of an individual and potentially affect his attitude, disposition, behaviour, decisions and activities. Such elements include beliefs, values, attitudes, habits, forms of behaviour and life styles of persons as developed from cultural, religious, educational and social conditioning (Adeleke *et al.*, 2003). These elements are learned and are shared by a society and transmitted from generation to generation. Thus, social-cultural environment, in relation to entrepreneurship, can be defined as consisting of all the elements of the social system and culture of a people which positively or negatively affect and influence entrepreneurial emergence, behaviour and performance, and entrepreneurship development in general. All such elements which condition the values, thinking and action of an individual with respect to entrepreneurship comprise the social-cultural environment of entrepreneurship (Adeleke, *et al.*, 2013).

2.2 Theoretical literature Review

2.2.1 Integrated Performance System (IPMS) for SMEs

Measuring Performance is a very complex task since SMEs differ from one to another. However, it is argued that what should be measured and what can be measured cannot be commonly agreed (Mayer, 2002). In that case, different models that have attempted to explain the performance of SMEs present different dimensions and indicators. Among those models are the approach of Balanced Scorecard (BSC), the approach of business excellence mode - (EFQM, Baldrige criteria), Total Quality Management (TQM), System Theory approach (Jackson, 2000), a Activities Based on Costing (ABC) approach and the Dynamic Integrated Performance System (IPMS) developed by Laitnen, (2002).

The current study adopted the IPMS which of two main categories such as external factors (financial performance and competitiveness) and internal factors (costs, production factors, activities, products, capital (revenue and profitability)). The current study adopts the IPMS for the following reasons: firstly, the approach is integrative as it sees the SMEs as an enterprise by itself on the one hand and, on the other as an enterprise connected with the external world; secondly its Performance Measurements (PM) are well articulated and can be measured. Therefore, financial performance, i.e. profitability, was taken as PM modified from the theory and thus fits the current study as far as SMEs are concerned in Shinyanga Municipality. Financial profitability as an indicator of the financial performance did not mean the absolute figures of profit rather than a relative term that in one way or another affects the profit of the company. Thus, it is a blending of two words profit-ability, meaning an ability to earn profit from all activities of the company (Pandey, 1980). The term means that the absolute figure of the company's profit can also be seen in terms of relative values, namely: constant, (no increase in profit since the business operation started); improvement (the profit has kept increasing since the start of the business) and deterioration (no profit gained since the start of the business).

2.2.2 The Socio-cultural Environment Theory

According to Weatherly (2011) and Felicia *et al.*, (2013), socio-cultural environment is described as an environment consisting of everything that is not contained within the economy or political system. Weatherly, (2011) makes clear that it is a social-cultural system which is made up of a collection of activities and relationships through which people engage in their personal and private lives which include population features, age, ethnicity, religion, values, attitudes, life style and association. These environmentally relevant patterns of behaviours lead to the creation of different cultural values in different societies, some of which influence the decision to create new businesses.

Over the years, a number of theories have been used to explain the impact of socio-cultural factors over women in SMEs. The theories tried to explain the social and cultural characteristics which cause people to be or not to be entrepreneurs. The earliest theory on the influence of socio-cultural environment on entrepreneurship was that of Max Weber. In his theory, Weber explained that society plays a big role in developing entrepreneurs. This is because the individual draws his values from the social values, morals and institutional framework within which he lives (Van de Ven, 1993). He argues that culture has great impact on the attitude and behaviour of individuals and their disposition to life. And indeed, whether or not an individual would develop and become an entrepreneur would depend on his disposition and value orientation.

Since a human being is a social animal from which the major agents of socialization (social factors) are family, the peers, the school and the media, reference groups, roles and statuses (Gamba, 2003; Phil, 2010), it is likely that such socialization agents serve as reference groups in the forming of a person's attitudes or behaviour (Gamba, 2003). For example, some people admire business people, musicians, politicians models, and so on. In most cases reference groups contain our heroes and heroines, for instance, they will tend to enter into entrepreneurship when they are inspired with their role model.

Also, family constitutes the most influential primary reference group that shape an individual's behaviour (Gamba, 2003). Families shape many of an individual's basic values

and attitudes including views and religion, politics, education as well as one's attitudes towards material possession and thrift. Also, families can install certain values and beliefs into their children, and until they become adults, these continue to influence their decision processes (Gamba, 2003; Tundui, 2012). Moreover, as culture is learned behaviour, formal and informal education plays an important role transforming cultural values from one generation to another. Thus, an education system helps to foster support and encourage those interested in knowing what it is like to run a business (Alwis and Senathiraja, 2003).

Thus, cultural factors and networks available to entrepreneurs can influence not only the choice of activity to be undertaken but also performance of that activity. While the current study seeks to know the relationship between social cultural practices and women SMEs performance, it is likely that the theory fitted the study as far as its specific objectives are concern. For instance, basing on the theory variables such as attitudes, husband support, the role of entrepreneurial education and women mobility were focused in relation to performance of women SMEs.

2.6 Empirical Literature Review

Stevenson and St. Onge's, (2005) survey in Zanzibar and Dar es salaam using both content analysis (categorical themes) and descriptive statistics reported some of the gender related problems with women MSEs performances. Such gender related problems include lack of property right, bank officers lacking confidence over women SMEs, women are denied access to business networks and suppliers insist on meeting their husbands when making business decisions. The above findings concur with Jagero and Kushoka (2011) who did a study on challenges facing women entrepreneurs in Dar es Salaam. In the study 120 women micro-finance entrepreneurs reported facing problems that included poor infrastructures, lack of permanent locations for their business and decline in business.

Lambert, (2013) who did his study in Dar es Salaam focused on assessments of the factors which affected women performance in their entrepreneurial activities. The researcher used 60 women respondents to collect the data which were analysed using content analysis and descriptive statistics to arrive at the frequencies, percentages and averages of the variables in the study. He found that women were faced with low skills, knowledge, lack of government support and policy to enhance their businesses. Furthermore it was found that there were a number of push and pull factors that had motivated most women to join the vendor business.

A survey done by Stevenson and St. Onge (2005) in Zanzibar and Dar es Salaam may need reviewing owing to the fact that culture is dynamic, changing over time and space with other factors like interaction, media, education and religious being at work. In that case, it will be incorrect to assume the findings valid considering that it has taken over a decade since the study was undertaken, hence a need for the current study.

While Majenga (2013) has reported on the influence of social-cultural factors on women SMEs in Tanzania, Maziku *et al.* (2014) add that the issue of social cultural practices has been found to have both positive and negative correlation between women SMEs performance; their study in Dodoma and Chamwino district using binary logistic regression found a negative aspects of social cultural practices such as lack of immobility, poor

attitude, ethnicity and lack of husband support which had a negative correlation with women SMEs performance. Further, social factors like education background and early family entrepreneurship background have positively affected their decision on choice of business and practices. Moreover, the findings also showed that their businesses were at higher risks of failure as they lacked business management skills and subjected to social-cultural factors such as traditions, religions, values and personalities.

Mashenene, Macha and Donge (2014) conducted a comparative study on the influence of social-cultural determinants (SCDS) on the choice of Enterprise Financial Sources (EFS) among the Sukuma tribe of Mwanza and Chagga tribe of Kilimanjaro. While the researcher used both descriptive statistics and case study for qualitative data, they found that traditional effects, strong ethnic density and higher risk-taking propensity affected the choice of (EFS). The Chagga use trade credit and loans from economic groups and financial institutions more often when compared with Sukuma of Mwanza.

Women are still affected by cultural and social factors which in one way or another demotivate them in start-up and growing in business; for instance, Ndunguru, (2006) conducted a related study on entrepreneurial motives and culture in Tanzania, focusing on Mtwara, Lindi, Ruvuma, Iringa and Mbeya regions. The author used multiple regression analysis and found a positive relationship between culture as an important explanatory factor that influences entrepreneurship motivation and start-ups. This is different in northern Tanzania -specifically among the Chagga ethnic group as compared to other ethnic groups in the study area – e.g. the Nyakyusa, the Gogo and the Sukuma. However, to what extent such comparison is established is less reported; meanwhile, though the current study will not address the issue of comparison among ethnic groups it is likely that the study basing on Shinyanga Municipality will establish the cause-effect relationship between women SMEs performance and social-cultural factors.

Other studies done in Tanzania include one by Nandonde and Liana (2013). They studied the “Analysis of women small scale entrepreneurs’ practices during business negotiations in Tanzania”, using a descriptive analysis method, they found that women were weak negotiators because they lacked some important skills. Furthermore, the findings have shown that women in SMEs have no soft skills that could enable them participate effectively during negotiations. Thus, women who do not possess these skills are more likely to become losers in various business deals. The findings complement those in the study by Kibanja and Munene (2012), which show that men have been raised to believe that they are always winners at the negotiation table. Findings have also shown that most of the women involved in business were those with low level of education; in fact most of them had not attended formal education but had only experiences. Such findings were justified by data collected from 500 women at their business working areas, aged 15-65 years.

Mbiti *et al.*, (2015) emphasize the influence of socio-cultural factors on the growth of women-owned Micro and Small Enterprises in Kitui, Kenya using a total of 390 women. While the study employed both descriptive and simple liner regression analysis the findings showed that the social cultural practises were reported at 60% influence on women entrepreneurship at the significant level of 0.05%. From the responses it was found that the

performance of women owned business was affected by traditions, beliefs and their community practices. It is further concluded that local traditions, customs, values, attitudes and hierarchies exert a strong influence on women-owned SMEs, but in contrast, the majority of women in the rural areas of Kitui have disentangled themselves from these factors. Generally, women appear to start businesses for survival, to seek for gender balance and family requirements with no enthusiasm to grow. This explains why their businesses remain small. Moreover, it was found that women are overburdened by many household roles that they play in the family.

Therefore, while the available studies in Tanzania addressed the physical attributes of women in business operations (Lambert, 2013; Liana and Nadonde, 2013), and focused on need assessment of women entrepreneurs (Stevenson and St. Onge, 2005), it is true that while Maziku, *et al.*, (2014) used similar variables with the current study to establish the relationship with women SMEs performance, the study differ from the current study in the way that Maziku, *et al.*, (2014) measured the women SMEs performance using the number of employees per year unlike the current study which uses financial profitability to measure women's performance. Generally, it can be concluded that none of the studies in Tanzania establishes the social-cultural variables (education, women immobility, husband support and negative attitude) with financial profitability of women SMEs performance. What is more, no study in Tanzania addressed the problem of women in SMEs in Shinyanga Municipal.

3.0 METHODOLOGY



3.1 Area of Study

The study was conducted at Shinyanga Municipality in Tanzania. Shinyanga region is one of Tanzania's 30 administrative regions. The region is bordered to the north by Mwanza, Mara, and Kagera regions and to the south by Tabora region, to the west by Kigoma region, with, Singida region to the south-east, and both Arusha and Manyara regions to the East (NBS, 2013). The reason for choosing Shinyanga Municipality was because women in Shinyanga Municipality are reported to make 51.26% of the whole population in the Municipality (NBS, 2013), yet Mashenene, (*et al.*, 2014) report that Sukuma women are adversely affected by weak ethnic density, low risk taking and poor support from their families at the average rate of 96.1%. - All of which may affect women in business participation and performance.

3.2 Sampling Techniques

The target population of this study was business women in Shinyanga Municipality totalling 130 women operating in various business categories/sectors - including wholesaling, retailing, groceries, clothing and design, beauty and hair styling salons, pharmacy, restaurants and stationeries. In selecting the representative sample, the researcher also considered the background information of the respondents such as age, marital status, nature of business sector, registrations status, and number of employees, capital machinery and total years spent in business.

In order to arrive at a representative sample size of 98 respondents, the current study adopted) a

Simplified formula of Yamane (1967). The established level of confidence was 95% whereby the degree of variability= 0.5 and level of precision (e) is = 0.05.

$$n = \frac{N}{1 + Ne^2}$$

Where n is sample size, N is the total number of study population, 130

Where e is the level of precision

$$n = 130 / (1 + 130 * 0.05^2)$$

n = 98 respondents

Purposive sampling was used as a sampling technique. The reason behind that was to arrive at SMEs women who share difference experiences regarding business operation. Also the justification of the sampling method was based on the facts that SMEs women differ in terms of their capital invested and size of the sector in terms of the number of employees. Saunders and Mark (2000) add that this form of sample is used when one wish to select cases that are particularly relevant to the study objectives and sample that reflects the population characteristics.

3.3 Data Collection Method

Documentary review as one of the secondary data were used to collect information relating number of employees, capital machinery invested in, status of the enterprise such as registered/licensed entrepreneurship, limited by share or unlimited enterprise.

Structured questionnaires were used as part of primary data collection tool to collect information relating to background information on the respondents, and variables for the four specific objectives (entrepreneurship training, husband support, and poor attitudes and women mobility). The responses for the variable (husband support) were collected using binary responses like 1= support and 0= not support, and the responses for the variable like women mobility were collected using binary responses such as 1= free to move and 0= not free to move. The responses were also collected using five point Likert scales (1= strongly disagree, 2= disagree, 3= uncertain, 4= agree, 5= strongly agree for variable like entrepreneurial training and poor attitudes. A total of 130 business women were involved in this method of data collection.

A semi-structured interview was conducted with the targeted population and their comments recorded. This involved direct interaction with 40 women who owned SMEs from Shinyanga Town. The method was also used to collect information that seemed not to be well handled and supplied by the respondents.

3.4 Data Analysis

Different Methods of data analysis were used for the four study objectives. Both descriptive statistics and multinomial logistic regression model were used. The study used descriptive statistics to show the patterns and distribution of the study variables such as SME

profitability, entrepreneurship trainings, husband support, poor attitude, women immobility and respondent background information. The study objectives were archived using multinomial logistic regression model. The aim was to establish the significant relationship between the role of social-cultural and women SMEs financial performance. Moreover, since the dependent variable (profitability) is expressed in terms of nominal values (constant, improved, deteriorated), this provided also the condition for using multi-nominal logistic regression. The model has been run under the assumption that social cultural variable (entrepreneurial education, husband support, poor traditional and women immobility) affects the profitability of women SMEs financial performance as exemplified in equation below.

The following variables were involved in the analysis: husband support, entrepreneurial training, and poor attitudes and women mobility. Dependent variable used in the study was performance measured in terms of profitability. Husband support as independent variable has been measured in terms of binary values such as whether husband support or no support; women mobility measured in terms of binary response such as whether they are free to move or not free to move; Poor attitudes were defined in terms of the following measurement indicators: women decision making, women property ownership and men family economic dominance. Measured in terms of five Likert scales ranging from strongly disagree to strongly agree. Moreover, dependent variable (profitability) was measured in terms of change in capital machinery (1= constant (capital machinery does not increase), 2= improved (increase of capital machinery), 3= deteriorated (decrease in capital machinery)).

$$p(y) = \frac{1}{1 + e^{-(b_0 + b_1x_{1i} + b_2x_{2i} + b_3x_{3i} + b_4x_{4i}) + e_i}}$$

Whereby;

$P(y)$

= the probability of an events to occur in that case profitability of women SMEs financial performance, β_{is}

= parameters to be estimated, x_{1i} = entrepreneurial training, x_{2i} = husband support, x_{3i}

= poor attitudes, x_{4i} = women immobility, ε_i

= error term which assumed to identically and independently distributed

Before the analysis the data was explored to check for outliers, normality and homogeneity (see appendix part 1) in that case box plot, histogram and descriptive statistics were run, then regression analysis using SPSS version 20 were also run. Finally the regression diagnostic was conducted to check for assumptions of the model.

4.0 RESULTS AND DISCUSSION

4.1 Results

Table 4.1 shows the fitting of the model, it also indicates the log likelihood ratio test of the overall model. The change in log likelihood measures the extent to which (how much) unexplained variability (new variance) have been explained in the data. Likewise, Chi-square test tests unexplained variance from the baseline model. Therefore, 83.337 (baseline model) 18.551 (final model) = 64.786 (Chi-square), this change is significant, which means our final model is better than the original model.

Table 4. 1: Model Fitting Information

Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	83.337			
Final	18.551	64.786	29	0.000

The next output as presented in table 4.2 shows the goodness of fit. Two values are explained here; the first is Pearson and the second is deviance. They have the same function. Goodness of fit explains how the model fits the data; it is likely to show whether the predicated values differ significantly from the observed values. Therefore, the deviance statistics shows that the model is fit to the data which is shown by Chi-square values of 16.701 and $p = 0.976$, this value is higher than 0.05, likewise, the Pearsons test shows that the model is also fit to the data at the Chi-square values of 13.266 and $p = 0.996$, the chi-square value is also higher than 0.05).

4.2 Goodness of fit

	Chi-Square	df	Sig.
Pearson	13.266	30	0.996
Deviance	16.701	30	0.976

Output four in Table 4.3 predicts the significance of each predictor to the model. The table shows that husband support had a significant main effect on the profitability of women SMEs financial performance, Chi-square = 46.346, $P = .000$, ($P < 0.05$). Attitudes over women ranked the second as it showed a significant main effect with the profitability of women SMEs financial performance, Chi-square = 20.0903, $P = .028$, ($P < 0.05$). Women mobility ranked the third as it showed the significant main effect with the profitability of women SMEs financial performance, Chi-square = 14.828, $P = .002$, ($P < 0.05$). The role of entrepreneurial skills showed that there is no significant relationship with the profitability of women SMEs financial performance, Chi-square = 10.964, $P = .446$ ($P > 0.05$).

4.3 Likelihood ratio test

Effect	Model Fitting Criteria		Likelihood Ratio Tests	
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	18.551 ^a	0.000	0	.
HS	64.897	46.346	4	0.000
AW	38.640	20.090	10	0.028
RE	29.515	10.964	11	0.446
WM	33.379	14.828	3	0.002

Table 4.4 shows individual predictor estimates and its effect size. The output presents the individual parameter in terms of total number of respondents and percentages. The table compares the two categories such as constant against improved and constant against deteriorating. However, because of the nature of the descriptive analysis the dependent variable has only one value observed in 59 (98.3%) sub populations. Therefore, the following findings were presented:

Whether the change of husband support from lack of support to support have shown a negative correlation with the increase in the profitability of women financial performance from constant to improvement, such relationships have been reported to be insignificant. For instance the multi nominal logistic regressions showed that a large part of the respondents equal to 37.8%, indicating that husband support had not significantly improved the profitability of women financial performance, $b = -17.48$, $p = .997$, however, EXP (β) = 2.55, this means that such relationship was explained by 2.25 times the odds of an outcome to occur following the change in the predictor. Moreover, 24.5% of the respondents showed a slight different, $b = -33.83$, $p = .994$, however, EXP (β) = 2.02.

Poor attitudes over women was found to have a positive relationship but insignificant at 5% level of significance with the profitability of women SMEs financial performance. For instance, a large number of the respondents 51% show that whether there was no negative attitudes over women this could not explain the significant increase in the profitability of women financial performance from constant to improve. However, such relationship has been explained by 5.49 times the odds for the outcome to occur. Such relationship was found to be larger when compared to a total population of 9.2% with $b = 32.91$, $p = .998$, EXP (β) = 1.95 and a total population of 8.2% with $b = 16.65$, $p = .999$ and EXP (β) = 1.7.

Table 4.4 shows that a large number of respondents 80.6%, found that the change in women mobility (not free to move to free to move) had a negative relationship with the profitability of women SMEs financial performance and that this relationship was not significant, $b = -18.98$, $p = .998$, this is explained by EXP (β) = 5.74 times the odds of an outcome to occur.

4.4 Parameter estimates estimate

Profitability		Bs	SD error	df	sg	EXP(β)
Improved	Intercept	19.585	1.725	1	0.999	
	HS 13(13.3%)	-69.25	.825	1	0.991	8.41
	HS 24(24.5%)	-33.83	.25	1	0.994	2.02
	HS 37(37.8%)	-17.48	2.33	1	0.997	2.55
	AW 50(51%)	33.94	1.56	1	0.998	5.49
	AW 9(9.2%)	32.906	1.57	1	0.998	1.95
	AW 8 (8.2%)	16.65	.52	1	0.999	1.7
	ES 54(55.1%)	1.98	1.42	1	0.164	7.2
	ES 10 (10.2%)	17.93	.35	1	0.996	6.1
	ES 9 (9.2%)	.467	.903	1	0.806	1.6
	WM 79(80.6%)	-18.98	1.73	1	0.998	5.74
	WM 10 (10.2%)	-1.22	.08	1	0.997	1.083
	WM 6 (6.1%)	30.014	.97	1	0.997	1.083

Note: HS means Husband support, AW means Altitude over women, ES: Entrepreneurial Skills WM means women mobility.

4.2 Discussion

4.2.1. The role of Entrepreneurial Skills in Influencing the Profitability of Women SMEs Financial Performance

The first objective aimed at investigating the extent to which the role of entrepreneurial skills influences the profitability of women SMEs financial performance. This study showed that 44.9% of business women in Shinyanga Municipality were primary school leavers, followed by 42.9% who were secondary school leavers. Such education background may influence the profitability of SMEs women in Shinyanga. Maziku *et al.*, (2014) report that education background had played a positive role in women business practices in Dodoma and Chamwino.

This research defined the role of entrepreneurial skills basing on the following measurable indicators: negotiation power, tracing and capturing market, winning of tender, monitoring financial flow of the business, forecasting business environment and adjusting accordingly, and dealing with competitors. Moreover, such roles were measured in terms of five point Likert scale (strongly agree, agree, undecided, disagree and strongly disagree).

The descriptive analysis in Appendix II shows that 66% to 77% of all respondents agreed that their entrepreneurial skills played a role in influencing the profitability of women business financial performance. This implies that the role of entrepreneurial training is important to profitability of women SMEs financial performance provided that women use their entrepreneurial skills to negotiate with different suppliers, trace market, forecast the business environment and adjusts accordingly, and deals with competitors in similar enterprises.

Moreover, the role of entrepreneurial skills in influencing women financial profitability is shown by likelihood ratio test as an output of multi nominal logistic regression in table 4.4

to have no significant relationship with the profitability of women SMEs financial performance, chi-square = 10.964, $P = .446$ (> 0.05). This means that whether the role of entrepreneurial skills helped women to negotiate with different suppliers, trace market, forecast the business environment and adjusting accordingly, and dealing with competitors in similar enterprises, such role could not predict the improvement in the profitability of women financial performance in Shinyanga Municipality. Such implication also concurs with other scholars who found that most women lack soft skills in negotiating with suppliers and winning of tenders, thus become losers in most business deals (Nandonde and Liana, 2013).

Further, while the role of entrepreneurial skills is found to be positive yet insignificant, other scholars such as Gogadi, 2011; Temba, 2014; Simsek and Uzay, 2009 have emphasized on the role of entrepreneurial education for women so that they may have skills to manage their businesses and make them grow economically. For instance, Gogadi, (2011) and Temba, (2014) emphasized that when women lack entrepreneurial education this could act as a bottleneck to their businesses and even prevent them grow economically. More is added that the role of education is a key determinate for the women business success (Simsek and Uzay, 2009)

4.2.2 The Role of Husband Support in Influencing the Profitability of Women SMEs Financial Performance

The second objective was to establish the extent to which husband support affects the profitability of women SMEs financial performance. The background information found that 60.2% of women SMEs in Shinyanga were married. The role of husband in the this study was measured in terms of whether they support or they do not support their wives in terms of capital support, finding market, taking care of family, helping them in business logistics (licensing and registration).

The findings show that more than 60% (see Appendix part II) of respondents were not supported by their husbands in providing them with business capital to start up the business, searching for market and looking for suitable business location. This implies that most of the women in Shinyanga Municipality take their own initiatives in stating their businesses as they lack support from their husbands. However, it was found that women in the Municipality are supported by their husbands in taking care of the family at an average level of performance (52%). Scholars report that most women are faced with the challenge of balancing their family responsibilities and their business operations; for instance, this is reported in Turkey from the study of 63 entrepreneurial women (Simsek and Uuzay, 2009).

What is more, in one way or another, husband support was not seen as a factor that could explain or influence positively and significantly profitability of women SMEs performance. For instance, the log likelihood as one of the multi-nominal logistic regression in table 4.4 showed that husband support had a significant main effect on the profitability of women SMEs financial performance. However, the effect size of the predictor to the profitability of women SMEs financial performance showed insignificant negative correlation with the profitability of women SMEs financial performance. This implies that whether there were changes of husband support from lack of support to support, this could not explain strongly the improvement of profitability of women financial performance (see Table, 4.1d). The

findings concur with the findings done by Maziku *et al.*, (2014) who reported that husband support had a negative correlation with Medium and Small Enterprise performance (MSEs) of women in Dodoma and Chamwino.

4.2.3 The Effect of Negative Attitude in Profitability of Women in SMEs Financial Performance

The third objective was to explain how negative attitude may affect the profitability of women SMEs financial performance. While the current study defines the negative attitude towards women in terms of lack of women family decision regarding their business, man dominance of family economy and lack of right to own property, more than 60% (see appendix part II) of women disagreed that their business profitability to have been affected by the above mentioned factors.

Contrary to this study, other past studies report negative attitudes towards women business; for instance, in Zanzibar and Dar es Salaam, it has been reported that there are negative attitudes towards women in different forms - such as lack of women property rights and lack of bank officials confidence over women (Stevenson, and St. Onge, 2005). They also report that most suppliers demand to deal with the husbands when making decision regarding market supply and when offering business tenders... However, the negative attitudes towards women in Shinyanga Municipality can be explained by the nature of family, husband and marital status of women. Maziku *et al.*, (2014) emphasize that this is because family background usually has a positive effect on women financial business performance.

The test from the log likelihood ratio test in table 4.4 implies that whether there are changes (agree to disagree) in women negative attitudes, such change does not explain the increase in women financial profitability in their SMEs. This may be due to the fact that women financial performance is the function of business experience and capital machinery of the business.

Also contrary to this study, Mbiti, *et al.*, (2015) found that social cultural practices negatively influenced the women business performance at Kitui Kenya at the level of 60% at the significant level of 0.05. Such influence is explained by traditions, beliefs and community practices. Maziku, *et al.*, (2014), also differs with the current study when he reports of a negative effect of poor attitudes over women SMEs financial performance.

4.2.4 The Effect of Women Mobility in the Profitability of Women SMEs Financial Performance

The fourth objective was to explain the extent to which lack of women mobility affects the profitability of women SMEs financial performances. The findings show that women are likely to move and search for business opportunities because more than 83% (see Appendix II) do not have any restrictions either from their husbands, family responsibilities or religion. This implies that in Shinyanga Municipality business women are less restricted from moving and searching for business opportunities. However, this result should be taken with precaution since 41% of the respondents are unmarried, categorised as widows, and divorced; in one way or another they may have no restriction as they husbands who might restrict their movements and initiatives. While scholars have reported that most women are

restricted by their husband in business network as reported by Stevenson and St. Onge, (2005), this is contrary to the current study which reports that women are free to move at the average rate of 83%.

Further, the findings from log likelihood test in Table 4.1d implies that although there were no restrictions of women to move searching for market, this condition had a positive effect with women financial profitability. However, such relationship was not seen to be important to their business. For instance, the effect size showed a positive relationship between variable which were deemed insignificant, $b=18.98$, $p=.998$, $EXP(\beta) = 5.74$ (see table 4.5).

The study is contrary to one done by Maziku, *et al.*, (2014) who found a negative correlation between women mobility and their business performance. While the current study reports that women are not largely affected by family responsibilities in running their business and searching for business opportunities, Simsek and Uzay, (2009) report to the contrary that women are still restricted from moving and searching for market because of the family responsibilities. Further, Maziku, *et al.*, (2014) does also differ with the current study since they found a negative correlation between women mobility and their business performance.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

It was observed that there were small effect relationship between the social-cultural factors and the profitability of women SMEs financial performance, and that relationship is observed to be 0.078% at the significant level of 0.05 (see the Appendix II). Therefore, in Shinyanga profitability for women SMEs is a function of other factors, unlike husband support, women mobility, and negative attitudes towards women. The relationship between the models showed a weak relationship which could not explain its importance or positive role to women in SMEs financial performance in Shinyanga. The study therefore, shows a shift of change regarding social-cultural theory as the study found a small effect of the factors underlying the social-cultural theory in effecting financial performance of women in SMEs in Shinyanga Municipality.

5.2 Recommendations

Shinyanga Municipality should provide training in entrepreneurial skills to SMEs women in SMEs. Such skills should be designed to focus on and underscore the following themes: searching for market, dealing with competitors, forecasting business environment and adjusting accordingly, and monitoring the financial flow of their businesses.

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APPENDIX I**Table 1:** Test of Autocorrelation Assumption (Durbin Watson Test)

Model	R	R Square	Adjusted R Square	SD. Error of the Estimate	Durbin-Watson
1	.340 ^a	.116	.078	.35677	1.56

a. Predictors: (Constant), women mobility, role of education, attitude over women, husband support

b. Dependent Variable: profitability

APPENDIX II**Table 2:** Age of the respondents

Age	Frequency	Percent
below 25	20	20.4
25-45	60	61.2
above 45	18	18.4
Total	98	100.0

Table 3: Level of education of the respondents

Education level	Frequency	Percent
None	11	11.2
Primary education	44	44.9
Secondary education	42	42.9
technical and university level	1	1.0
Total	98	100.0

Table 4: Ethnicity of the respondents

	Frequency	Percent
Native	66	67.3
Immigrate	32	32.7
Total	98	100.0

Table 5: Marital status of the respondents

	Frequency	Percent
Married	59	60.2
Un married	26	26.5
widow	11	11.2
divorced	2	2.0
Total	98	100.0

Table 6: Number of children of owned by the respondents

	Frequency	Percent
None	7	7.1
1-2	59	60.2
3 and above	32	32.7
Total	98	100.0

Table 7: Number of employee

	Frequency	Percent
1 employees	64	65.3
2 to 4 employees	33	33.7
5 or more employees	1	1.0
Total	98	100.0

Table 8: Legality of the enterprise

	Frequency	Percent
Sole proprietor	97	99.0
Limited liability	1	1.0
Total	98	100.0

Table 9: Business period of the enterprise

	Frequency	Percent
one year	11	11.2
two years	11	11.2
three years	17	17.3
four years	14	14.3
above five years	45	45.9
Total	98	100.0

Table 10: Registration (Brela) of the enterprise

	Frequency	Percent
Registered	36	36.7
Not registered	62	63.3
Total	98	100.0

Table 11: Business sectors

	Frequency	Percent
Trade	60	61.2
Services	33	33.7
Manufacturing	4	4.1
Others	1	1.0
Total	98	100.0

Table 12: Husband support

	Support	Not support	I don't no
Does your husband support you with capital for your business?	30.6%	62.2%	7.1%
Does your husband support you in fining for market?	20.4%	72.4%	7.1%
Does your husband help you in finding for your business location?	20.4%	72.4%	7.1%
Does your husband take care of your family when you are busy with your business?	52%	41.8%	6.1%
Does your husband support you in meeting other business logistics such as legal aids and licensing follow up?	58.2		41.8

Table 13: Attitude over women

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
As a woman I do not have family decision regarding business operation	26.5%	61.2%		3.1%	9.2%
My family economy is a man dominance	16.3%	72.4%		5.1%	6.1%
As a woman I have no right to own property at my family	19.4%	64.3%	4.1%	5.1%	7.1%

Table 14: Entrepreneurial Education

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
My education has helped me to make negotiation with suppliers	1%	2.1%	4.1%	66.3%	26.5%
My education has helped to capture and trace different market for my business	2%	2%	2%	68.4%	25.5%
My education has helped me to win tenders for my business	4.1%	1%	2%	78.6%	14.3%
My education has helped to monitor the financial flow in my business	17.3%	1%	1%	76.5%	4.1%
My education has helped me to forecast business environment and adjust accordingly	4.1%	2%	1%	75.5%	17.3%
My education has helped me to deal with competitors by adjusting product and service features	3.1%	1%	1%	76.5%	18.4%

Table 15: Freedom of movement

	Free to move	Not free to move
My husband restricts me from moving for business opportunity	89.8%	10.2%
Family roles have restricted me from moving for business operation	84.7%	15.3%
My religious does not need women to move beyond their family for business operation	93.9%	6.1%

THE ROLE OF SECONDARY SCHOOL TEACHERS IN ENHANCING STUDENT CENTRED LEARNING APPROACH IN KASULU TOWN - KIGOMA, TANZANIA

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ABSTRACT

While the teaching and learning processes need to be Student Centred Learning (SCL), teachers have continued to dominate classes and fail to reflect the students' needs, learning styles and learning experience. This study aimed to assess the role of secondary school teachers in enhancing SCL in Kasulu Town. The study specifically focused on three variables namely: teaching strategies, students' diversity and learning needs. The study involved a sample of 124 respondents from which both questionnaires and observations were used to collect the data. The findings from descriptive analysis showed that teachers frequently assumed that using a bundle of teaching strategies was all they needed to achieve SCL. Moreover, secondary school teachers were frequently found to take into consideration students' diversity and learning needs. The findings from independent sample t-test analysis showed that on average, those secondary school teachers who attended SCL scored lower compared to their counterparts who did not; the differences were significant at small effect size in teaching methods ($t(62) = -3.687, p > .000, r = 0.32$). The Findings also were insignificant with small sized effect in accommodating students' diversity and learning needs, ($t(62) = -.765, p > .453, r = 0.08$). The above findings imply that pedagogical practices regarding the successful implementation of SCL have slight differences when two groups of secondary school teachers who attended SCL training and those who did not attend are compared. It is recommended that Teachers' Professional Development needs to consider the content design for SCL training for in-service secondary school teachers.

Key words: Student Centred Learning, teaching methods, students' needs and diversity.

1.0 INTRODUCTION

1.1 Background to the Study

While the teaching and learning processes have been emphasized to reflect students' democracy in learning, such democracy should be reflected through successful implementation of Student Centred Learning approach (SCL). Scholars attempt to explain that the learning and teaching process should reflect learners' characteristics (Freire, 1970; Shulma; 1987; Mtitu, 2014; Angela, et al., 2016; Anney, 2013; Mpapalika, 2013). They argue that such characteristics include the following: students' interests, needs, learning style and level of learning difficulties. Despite unsuccessful attempts to implement SCL by secondary school teachers in some developing countries, world-wide the approach was highly regarded and concerted efforts were being made to adapt and encourage its extensive use in the education system... For instance, European nations after signing the Bologna Declaration on European Higher Areas (EHEA) in 1999, ratified by 20 countries, they focused on effective implementation of SCL during the teaching and learning process (Angela, 2016).

In Sub-Saharan Africa issues about teacher' knowledge of SCL, what SCL entails, how it is implemented, and how assessment and feedback are done are still reported to be a problem (O-Saki, 2013, Anangisye, 2011). In Tanzania, a successful implementation of SCL can be traced back to 1967 when Education for Self Reliance (ESR) was put in place. SCL had started to define the national education policy and philosophy. For instance, ESR defined education that was based on practice and less focused in examinations and theoretical teaching. ESR stated that it is education that transforms the learner to be creative, critical thinker, problem solver, inquirer and one with analytical skills. Nearly three decades later different transformations on the education sector began to be introduced; these included the following: shifting from Teacher Centred Learning (TCL) to SCL (Penny, 1998, URT, 1995; Tanzania Institute of Education, 2005; URT, 2010) and the launching of Secondary Education Development Plan (SEDPs) of 2004/2009 and 2009/2014. The two strategies have been adopted with the following aim: education access, education equity and education quality. However, despite the above approaches teaching, learning, and assessments are still reported to have a lot of failures in Tanzanian secondary schools (Anney, 2013; Dadi, 2011; Mpapalika; 2013; Mtitu; 2014). Therefore, this study aimed to assess the role of secondary school teachers in enhancing Student Centred Learning (SCL) for secondary schools in Kasulu Town.

1.2 Statement of the Problem

Despite the effort which have been made in empowering secondary school teachers in successful implementation of SCL, secondary school teachers have been reported to dominate the classes and fail to link the learning experiences to real life situations (Anney, 2013; Dadi, 2011; Mpapalika; 2013; Mtitu; 2014). Such scholars evidenced that the teaching process, the learning process and the assessment process have not been reflecting the students' characteristics (interests, needs, learning style, level of learning difficulties). They argue that failure to effectively implement SCL is also explained by the fragmented, non-integrated, discontinuity and more theoretical teachers' in-service trainings. However when scholars attempt to study such problem, they focus on how teachers attempt to implement the SCL with less focus on how much such implementation is achieved. For instance, in Kasulu Town, despite the higher ratio of secondary school students per teachers

(1 secondary school teacher per 17 students), students' performance is still low, which may have been explained by inconsistency in implementing SCL. Therefore, not only does this study explain how the teaching and learning process is implemented with regard to SCL; it also attempts to explain the extent to which the implementation of SCL is achieved in secondary schools at Kasulu Town.

1.3 Study Objectives

1.3.1 General Objective

The study aimed to assess the role of secondary school teachers in enhancing Student Centred Learning (SCL) for secondary school in Kasulu Town.

1.3.2 Specific objectives

Specifically, the study intended to:

- i. Examine different strategies used by secondary school teachers toward achieving Student Centred Learning approach.
- ii. Examine different strategies used by secondary school teachers to achieve the students' needs and learning styles.
- iii. Establish the effectiveness of teaching and learning process with regard to successful implementation of SCL.
- iv. Find out the extent to which students' needs and learning styles are effectively achieved with regard to the implementation of SCL.

1.4 Research Questions:

- i) What are the different strategies used by secondary school teachers to effectively apply the Student Centred Learning approach?
- ii) What are the different strategies used by secondary school teachers to achieve the students' needs and learning styles?
- iii) To what extent are teaching and learning process effectively achieved with regard to successful implementation of SCL?
- iv) To what extent are the students' needs and learning styles effectively achieved with regard to the implementation of SCL?

1.5 Significance of the Study

Because of the inconsistency that has been demonstrated by secondary school teachers in implementing SCL, this study addressing the problem becomes suitable for classroom teachers regarding the successful implementation of SCL during teaching and learning practices. For curriculum developers the study will be a source of reference in designing an appropriate training programme that reflects SCL. The study also is in line with Sustainable Development Goals and Tanzania Development Vision 2025 which focuses on quality education.

2.0 LITERATURE REVIEW

2.1 Operational Key Term

The common definition shared by scholars is that Student Centred Learning (SCL) refers to the teaching and learning processes as well as assessments and evaluation practices that reflect learners' characteristics (interests, needs, learning style, and levels of learning difficulties). They argue that in SCL, the learner becomes actively involved in learning. The learner becomes the creator of knowledge after successfully linking the classroom learning experience with the real life experience (Freire, 1970; Shulma; 1987; Mtitu, 2014; Angela, *et al.*, 2016; Anney, 2013; Mpapalika, 2013). However, while SCL is covered in a broader context of teaching methods, students' needs and learning styles as well as assessments and evaluations practices, the current study limits itself to teaching and learning processes as well as students' individual characteristics (students' needs and learning styles).

2.2 Theoretical Framework

This study adopted Critical Perspectives (CP) theoretical approach. The theory is an extension of the Freiren theory of education on critical pedagogy (Freire, 1970). This study adopted CP because the theory is able to suggest strength and weakness of the system (learning and teaching processes) as well as providing alternative solution on its challenges (Freire, 1970). Among the assumptions of the theory are the following: firstly CP assumes that the teaching and learning in secondary schools should enable the learner to use their experience to reflect the political environment within their real world; secondly teaching and learning processes should enable the learner to be critical of the system (social, political, economic and cultural system) (Ellina, 2000; Freire, 1970; Vandick, 1915); thirdly the classroom should be the free ground for communication whereby learner creates meaningful and multiple understandings (Freire, 1970, Wink, 1998), so that he/she will be able to construct knowledge of his/her own (Lodge, 2000); lastly teacher should make the learner aware of the system, equip them with skills and knowledge, attitudes, and that the teacher should be problem poser and learner be problem solver (Aliakbari and Faraji; 2011; Dewey, 1963; Eliana, 200; Mc Laren, 1994). Therefore, CP implies that in teaching and learning environments, the teacher should be facilitator, problem poser, observer, supporter of the student's needs, interest and diversity in learning styles. The student should be an active learner who integrates the learning experience with the real life experience, and that he/she has a democracy to criticise on the economic, political, social and cultural system.

The application of the theory has been possible because of its holistic nature in the teaching, learning and assessment of secondary schools. For instance, with CP the teacher empowers students because through SCL the theory ensures student's self reflection, critical thinking, problem solving, inquiries and meaningful construction of ideas. In that case, the teacher makes sure that students' interests, needs, learning difficulties and diversity are met. Also CP in assessments enables the students and teachers share feedback, negotiate on their marks, and students understand their performance through criteria referenced test. During students' assessments, students talk with their teachers on their weakness and strength. However, the weakness of CP depends on the competence of the facilitator in reflecting SCL practices. Regarding this weakness, the researcher observed this by establishing the measuring indicators from past studies regarding SCL (teaching and learning strategies and students' needs and learning styles) in relation to CP.

2.3 Empirical Literature Review

Angela, *et al.*, (2016) studied the implementation of SCL in European countries (Slovenia, Lithuania and Poland). They found that teachers in the three countries have successfully implemented SCL. For instance, teachers were found to have included varieties of methods like individual or small group based activities and solving practical problems. In Poland teachers were also found to be supporting students for information access, support students' diversity and individual learning needs by offering additional consultancy. Teachers have also been found to support students with learning activities and have been providing students with additional explanations.

Dadi (2015) explains that the implementation of SCL in Sudan and Ethiopia has not been successful because of poor in-service teachers' quality of trainings. Such poor training has been attributed to limited budget, lack of integrated programmes, lack of continuity for training programmes and poor assessment techniques. Scholars argue that poor training quality to teachers has led to lack of special skills and knowledge, methodological competence and communication competence for teachers. Thus, they jeopardise the implementation of SCL.

In Tanzania related studies include one done by Anney (2013) in Babati District. The study aimed to investigate how SCL is implemented by licensed teachers in the area of pedagogy, assessments and evaluations. The findings revealed the following: science teachers lack knowledge of subject matters: they cannot prepare scientific practicals; they cannot test theories; they cannot prove hypotheses, they fail to make connection between scientific ideas and students' text books, they fail to use and provide relevant examples, they fail to involve students in higher-order thinking skills, and that they fail to understand learner's needs, diversities, and students' emotion. However, Anney's study lacks consistency of what should be a clear definition for SCL regarding the teaching and learning strategies and students' individual needs and learning styles.

Mpapalika (2013) also did a study at Kibaha Secondary School. The researcher investigated the nature of assessments and challenges facing qualified science teachers. The study employed 50 experienced and qualified teachers and used both thematic coding and descriptive analysis to analyse the data. The findings showed that Kibaha Science Secondary School teachers lacked the knowledge of the subject matters. In the case of assessments the findings showed that 86% of teachers were able to give timely feedback to students. A total of 58% teachers were able to discuss with their students on their marks and moderate them. However, the study does not indicate whether teachers used to discuss the students' learning difficulties with their students in terms of what they can do and what they cannot do.

The study done in Iringa (Mtitu, 2014) postulates that SCL still has some limitations regarding both teaching/learning and assessments practices that are demonstrated by secondary school teachers in Geography subject. The researcher focused on the investigation of the teachers' understandings of the SCL practises and how effectively they implement SCL in the classroom contexts. The author used qualitative general inductive analysis method to analyse the data collected from nine teachers. The study found that teachers were poor in their subject matter. The findings also showed that teachers failed to

reflect students' cultural background, prior-knowledge and their differences in learning styles. Moreover, some challenges are also reported regarding the successfully implementation of SCL, these include, big class size, low English proficiency, low teachers' motivation, limited knowledge and skills in the subject areas and curriculum overload.

Therefore, different scholars have reported that teachers in secondary school, irrespective of their qualification and in-service trainings, have not yet implemented successful Student Centred Learning approach (Angela, *et al.*, 2013; Anney, 2013; Dadi, 2015; Mtitu, 2014; and Mpapalika). However, most of studies carried out in Tanzania were not consistent with the term SCL; as a result when they attempted to study its successful implementation in the classroom context they generally studied how it was implemented but failed to show how much the implementation of SCL was successfully achieved. Therefore, the current study bridges the gap by assessing the role of secondary school teachers in enhancing SCL in secondary schools at Kasuru Town.

3.0 METHODOLOGY

3.1 Study Area and its Justification

The study was conducted at Kasulu Town which is among the councils found in Kigoma region, one of the regions in the western part of Tanzania. The reason that motivated the researcher to conduct the study in this area stemmed from the realization that despite the higher ratio of secondary school students per teachers (1 secondary school teacher per 17 students), students' performance was still low as reported by NECTA results of 2016 and 2017. The researcher saw the need to assess the role of teachers in implementing successful SCL which, in one way or another, is connected to students' performance.

3.2 Research Design

Research design is the arrangement of conditions for collection and analysis of data in a manner that aims to achieve the research purpose with economy in procedure (Kothari, 2004). This study adopted a cross sectional design from which all data was collected at once. Thus, Kasulu Town serves as a case study from which all detailed data was collected at the same time from secondary school teachers

3.3 Population

The study involved a total of 203 secondary school teachers from a total of 10 selected government secondary schools. A total of 135 secondary school teachers were selected as a representative sample. The study adopted Yamane (1967) simplified formula to arrive at the representative sample. The established level of confidence was 95% whereby the degree of variability=0.5 and level of precision (*e*) is = 0.05.

Where *n* is sample size, *N* is the total number of study population, 203

Where *e* is the level of precision

$$n = 203 / (1 + 203 * 0.05^2)$$

n = 135 respondents

Kothari, (2004) explains that after deciding the sample size the next step is to decide the sampling techniques to be used. The author explains that sampling techniques is the scientific method that involves the selection of the representative sample from the large population. In that case, the following sampling techniques were used:

Purposive sampling was used to select one District Education Officer and 10 Head Masters from secondary schools in Kasulu Town. The reason for using purposive sampling is grounded on the fact that the selected sample comprised government personnel responsible in making follow-up and examination for the successful implementation of SCL.

Systematic sampling have been used to select 10 government schools found in the Kasulu Town. Systematic random sampling has also been done to arrive at 124 secondary school teachers selected from the total population 192. The reason for using the method is to avoid bias from the researcher and arrive at a representative sample (Kothari, 2004).

Table 1 The Distribution of population, sample size and sampling techniques

S/N	Description	Population (frequencies)	Sample size (frequencies)	Sampling Techniques
1	District Education Officer (DEO)	1(0.49%)	1(0.74%)	Purposive sampling
2	Head Teachers	10 (4.92%)	10 (7.41%)	Purposive sampling
3	Secondary school teachers selected from 10 schools	192 (94.58%)	124(91.85%)	Systematic random sampling
4	Total	203 (100%)	135(100%)	

3.4 Data Collection Methods

The study used triangulation approach of data collection. In that case different data collection methods such as questionnaires, personal interview and observations were used. The aim of using different methods of collecting data was to achieve the validity of the data and to make sure that the weakness of one method is solved by the other. On the basis of the foregoing, the following methods of data collection were used. Questionnaire tool has been used in the current study because of its suitability in collecting detailed information of the phenomenon (Kothari, 2004). The method was used to collect the information from a total of 124 secondary school teachers. It has been used to collect descriptive data for teaching strategies and students' individual needs and learning styles. The five likert scales were used to collect the responses from the respondents, they include: 1 = very frequently used, 2 = frequently used, 3 = occasionally used, 4 = rarely used, and 5 = never used.

Personal interviews were done with ten secondary school headmasters in and with one District Education Officer (DEO) in Kasulu Town. A total of five questions were designed for them. The interview questions related to their experiences in both teaching strategies, students' individual needs and learning styles with regard to successful implementation of SCL. The current study used personal interview from the reason established by Saunders *et al.*, (2012) that the method is good when dealing with participants who are familiar with the phenomenon. In that case one DEO and ten headmasters whose work was related to this

research were involved. The authors also explain that the method is good since it provides the participants (DEO and headmasters) an ability to reflect on the topic and event without the need for written notes.

3.5 Data Analysis

This study used descriptive statistical analysis to achieve objectives one and two. The outputs from descriptive analysis showed the frequencies and the percentages for the teaching and learning strategies as well as students' individual needs and learning styles used by secondary school teachers (see table 4.1, 4.2 and 4.3). Field, (2014) explains that descriptive statistical model is one used when we are interested only in summarising the outcomes of the phenomenon across its descriptive themes and sub-themes. The method is used because it gives the estimated values for the phenomenon (teaching strategies and students' needs and learning styles).

This study used independent samples-t test analysis to achieve objectives three and four above. Independent sample t-test analysis method is able to establish the mean differences within and across different phenomenon, in that case whether there are differences in performance between those secondary school teachers whether they received SCL or not) in relation to SCL implementation. To apply the method successfully the researcher explored the data by running descriptive statistics and tested the assumptions of normality by running Levene's test for equality of variance (see table 4.6 and 4.8). The leading hypothesis is that there is a significant relationship between secondary school teachers' who may have received SCL trainings and those who had not received SCL trainings in terms of teaching practices and students' needs and learning styles. Field, (2014) explains that Independent samples-t test is used when there are two experimental condition and different participants were assigned to each condition. In that case, this study collected participants' responses and the analysis was run to get the size effect. Below is the model

for statistical analysis:

$$t = \frac{\overline{x}_1 - \overline{x}_2}{\sqrt{\frac{s_p^2}{n_1} + \frac{s_p^2}{n_2}}}$$

Whereby: t = t-test statistic value, \overline{x}_1 = mean for the independent sample one, \overline{x}_2 = mean for independent sample two, s_p^2 = standard errors of sampling distribution, n_1 = total number of independent sample one, n_2 = the total number of independent sample two.

4.0 RESULTS AND DISCUSSION

4.1 Reflection of SCL Approach in the Teaching and Learning Process by Secondary School Teachers

This objective aimed at examining the extent to which teaching and learning methods by secondary school teachers reflect the SCL. The researcher measured the teaching and learning practices in terms of both teaching methods and learning resources used.

4.1.1 Teaching Methods

Teaching methods were measured using the following measurement indicators: group discussion, problem solving practices, workshop, case study, role play and collaborative paper assignment. The respondents were asked to supply their response using five likert scale scores such as 5 = used very frequently, 4 = frequently used, 3 = occasionally used, 2 = rarely used; 1 = never used. Table 2 shows the results.

Table 2 Teaching Methods (N= 124)

Factors	Mean	Std. Deviation
Group Discussion	1.9355	1.01005
Problem solving practices	1.7500	1.09415
Workshop	2.3710	1.10775
Case study	2.2097	.97342
Role play	2.6694	1.24758
Collaborative paper assignments	2.0081	1.17906

The findings indicated that most of secondary school teachers frequently used group discussion, problem solving practices, workshop, case study and collaborative paper assignments when compared with role play which were reported to have been occasionally used. The findings imply that secondary school teachers in Kasulu Town master different teaching and learning methods. However, the successful implementation of SCL is not only achieved through using a bundle of teaching strategies; some precaution should be taken on the effective use of different methods. While secondary school teachers were found to have used a set of teaching methods which reflected SCL, this finding is challenged by Freire (1971) who sees such practices of using a set of teaching methods not to be so friendly in successful implementation of SCL: this is because students are sometime integrated with a set of teaching methods but left unable to reflect what they learn in the real environments, sometimes leaving teachers dominating the class. Moreover, the students were occasionally learning through role play; however, they were not able to link between the subject matter and their life experience.

4.1.2 Learning Resources

The teaching and learning practices were also measured in terms of learning resources. Table 4.9 shows different uses of learning resources during teaching and learning processes. The researcher measured the learning resources by the following measurement indicators: the use of lesson notes, the use of resource book, the use of research publication, the use of statistics resources, the use of scientific publication and the use of list of books.

Respondents were kindly asked to provide their responses using five likert scales such as 1 = used very frequently, 2 = used frequently, 3 = used occasionally, 4 = used rarely. 5 = never used.

The findings from descriptive statistics showed that secondary school teachers had frequently used lesson notes, resource book and list of books. For instance, lesson notes had shown a mean scores of 2.0403 at the standard deviation of 1.42794, the use of resource books had been shown by the mean value of 2.2016 at the standard deviation of 1.16158, the use of list of books had been shown by the mean value of 2.4919 at the standard deviation of 1.10796. Moreover, secondary school teachers were occasionally using research publications, scientific publications and use of statistic resources. For instance, research publications had been shown by the mean value of 2.9516 at the standard deviation of 1.202, scientific publication had also been shown by the mean value of 2.9597 at the standard deviation of .87791 and the use of statistics had been shown by the mean value of 2.9516 at the standard deviation of 1.14661.

Table 3.2: The use of learning resources during teaching and learning processes (N= 124)

Factors	Mean	Std. Deviation
The use of lesson notes	2.0403	1.42794
The use of Resource books	2.2016	1.16158
The use of list of books	2.4919	1.10796
The use of research publications	2.9516	1.20200
The use of scientific publications	2.9597	.87791
The use of statistics resources	2.9516	1.14661

Kuchan and Smith, (2011) and Tabulawa, (1998) support the findings by emphasizing that since students rely on teachers' notes and limited text books, with less access to multiple source of knowledge, this may turn them into inactive learners who were unable to construct meaning on their own.

Generally, objective one found that some of secondary school teachers at Kasulu District had frequently been using teaching methods that might reflect the SCL practices, as most of the methods were found to engage students in learning either individually or by interacting with others. Such methods include: group discussion, problem solving practice, workshop, case study and collaborative paper assignments. Moreover, while secondary school teachers supply their students with limited sources of reading (lesson notes and books), they occasionally orient their students to other sources of materials such as research publications, statistic resources and scientific publications.

4.2 Reflection of SCL in Achieving Students' Diversity and Individual Learning Needs by Secondary School Teachers

The second objective aimed to explain how secondary school teachers successfully reflect students' diversity and individual learning needs during successful implementation of SCL. Students' diversity and individual learning needs were measured using the following measurement indicators: provision of learning advice and consultancy, provision of extra test out of the curriculum, speaking with students with individual problems, helping students from family with limited access to education, use of special support measures for students from family with limited access to education, repeating and enhancing the topic and use newly developed study methods. The respondents were asked to give their responses using five likert scales such as 1 = used very frequently, 2 = used frequently, 3 = used occasionally, 4 = used rarely, 5 = never used.

The findings from descriptive analysis showed that secondary school teachers had been found to frequently use learning advice/consultancy, extra test out of the curriculum, speaking with students with individual problems, helping students from family with limited access to education, special support measures to students from family with limited access to education, repeat and enhance the topic and use new study methods. This implies that secondary school teachers are aware of the student diversity and the learning difficulties they face during the teaching and learning processes; they were found to have given special treatment to different students with different family background and different learning levels.

Table 4 Achieving students' diversity and individual learning needs by secondary teachers (N=62)

Factors	Mean	Std. Deviation
Learning advice or consultancy	1.6048	1.20850
Extra test out of the curriculum	1.7227	.93812
Speak with students with individual problems	1.7097	1.13176
Help students with English problem	2.2258	1.34852
Helping students from family with limited access to education	2.4194	1.09021
Use of special support measures for students with disadvantaged background	2.4677	1.29687
Repeat and enhance the topic	1.9597	1.12184
Use newly study method	2.3548	1.45498

Anney's (2013) study of some of secondary schools in Babati refutes these findings as the researcher found that secondary school teachers were unable to understand the students' diversity, needs and emotions. Moreover, the findings also showed that secondary school teachers occasionally found difficulty in repeating things when their students met with learning difficulties. This implies that other students are left with their learning difficulties unattended.

Therefore, secondary school teachers were frequently found to have been using learning advice/consultancy, extra test out of the curriculum, speak with students with individual

problems, helping students' from family with limited access to education, use of special support measures to students' from family with limited education disadvantaged family background and use newly developed study methods. The study also found that occasionally secondary school teachers were found to have difficulties in repeating things that students had difficulty with.

4.3 Difference in Implementing Students Centred Learning in Teaching and Learning Practices between Secondary School Teachers who attended for SCL and those who did not

The results show that those teachers who did attend the SCL training averagely scored less than those teachers who did not attend the training in Kasulu District. This implies that those teachers who attended SCL did not master well SCL approaches when compared to their counterpart. It implies that those secondary school teachers who attended for SCL training were not good in using the following teaching methods when compared with their fellow teachers: group discussion, problem solving practices, workshop, case study, role play and collaborative paper assignment.

The findings from independent t-test analysis (Table 5) showed that the differences in their performance regarding SCL implementation is reported at the mean performance of (-2.75806) at the significant level of ($p > .000$). This implies that such differences were meaningful since those teachers who did not go for SCL seem significantly better. Furthermore, when the researcher considered the effect size ($r = 0.32$), it showed that such effect is medium. This also implies that there was 32% variance of performance between the two groups.

Table 5: Paired samples statistics for teaching methodology (N= 62)

	SCL intervention	N	Mean	Std. Deviation	Std. Error Mean
TM	yes	62	11.5645	2.55189	.32409
	no	62	14.3226	5.30936	.67429
		124			

Table 6 Independent samples test

			Levene's Test for Equality of Variances		t-test for Equality of Means						
			F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Interval Difference	Confidence of the Upper
TM	Equal variances assumed		49.839	.000	-3.687	122	.000	-2.75806	.74813	-4.23907	-1.27706
	Equal variances not assumed				-3.687	87.756	.000	-2.75806	.74813	-4.24488	-1.27125

However, such medium sized effect brings different implications as follows: firstly the result could probably have been caused by the background information of the respondents

in terms of level of education. For instance, while the total population used were 124, about 72% (equal to 58.9%) were degree holders and only 51 respondents (equal to 41.1%) were Diploma holders. Therefore, such results could have been attributed to a higher number of respondents (secondary school teachers) who were degree holders.

Secondly, the working experience of the respondents could also have been another reason for the above results; for instance, most of respondents in the study had worked between 11-16 years while the next group with many respondents had worked between 0-5 years. Thirdly, it can also be said that weakness, fragmented and unplanned teachers professional development as it is reported by different scholars may be reason for the results (Anney, 2013; Dadi, 2011). Therefore, those teachers who have been found to attend SCL in Kasulu District do not seem to be doing better in teaching methodology and that the difference is significant at the medium sized effect. For instance, on average, the participant who did attend Student Centred Learning scored less in teaching methods 11.5645, SE= 2.55189), than those who did not attend SCL trainings (M= 14.3226, SE= 5.30936). This difference, -2.75806, BCa 95% {- 4.23907, -1.27706}, was significant $t(62) = -3.687$, $p > .000$, however it did represent a medium sized effect, $r = 0.32$.

4.4 Difference in Implementing Student-Centred Learning in Students' Diversity and Learning Needs between Secondary School Teachers who Attended SCL and those who did not.

Two outputs from independent t test analysis are provided (table 4.7 and 4.8). The results show that on average, the participant who did attend Student Centred Learning scored less in students' diversity and learning needs (M= 18.307, SE= 4.793), than those who did not attend SCL trainings (M= 19.121, SE= 6.761). This difference, -.81636, BCa 95% {- 2.9647, -1.34}, was not significant $t(62) = -.765$, $p > .453$, however it did represent a small sized effect, $r = 0.08$.

Table 7 Paired sample statistics for students' diversity and learning differences (N=62)

	SCL Intervention	N	Mean	Std. Deviation	Std. Error Mean
ID	Yes	62	18.3065	4.79272	.60868
	No	62	19.1228	6.76142	.89557

Table 8 Independent sample test

		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	(2- Mean Difference	Std. Error Difference		Lower	Upper
ID	Equal variances assumed	.415	.521	-.765	117	.446	-.81636	1.06774		-2.93097	1.29826
	Equal variances not assumed			-.754	100.080	.453	-.81636	1.08284		-2.96465	1.33194

The results imply the following: firstly, that those teachers who did attend the SCL training averagely scored less than those teachers who did not attend the SCL training in accommodating students' diversity and learning needs; secondly, such average score is interpreted in terms of teacher use of advice and consultancy, use of extra test out of the curriculum, speaking with students with individual problems, helping students from family with limited access to education, use of special support measures for students from family with limited to access to education, repeat and enhance the topic, difficulty in repeating things, and use of newly developed study methods. Lastly, such average differences were small in size. The reason for this could be that the sample used came from the population of the same characteristics - e.g. as education level and working experience. Therefore, there is insignificant differences between secondary school teachers in Kasulu Town who attended SCL trainings and those who did not attend at the small medium sized effect. effect, $r=0.08$.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The implementation of SCL in Kasulu district remains a matter of degree regarding the two aspects – namely, the teaching methods and accommodating students' diversity and learning differences. For instance, teachers' assume that using a set of teaching strategies would enable them achieve SCL. However, in terms of teaching methods, secondary school teachers were still found with significant differences at low effect size in achieving SCL. Further, learning resources used for students did not provide for a critical mind and independent thinking since students are limited to lesson notes and classroom text books. Students are occasionally using research, scientific publications and statistic resources. Furthermore, while secondary school teachers seem to be aware of students' diversity and

learning styles, such awareness was found to be insignificant at low effect size with regard to achievement of SCL.

Therefore, while different teaching methods and strategies have been found to be frequently used in achieving students' diversity and learning styles, the implementation of SCL is still not achieved since the performance between those secondary school teachers who have attended SCL training and those who did not attend was found to be at small effect size.

5.2 Recommendation

In the case of training practices, teachers' professional development should be designed in a way that specifically reflects SCL practices in terms of teaching practices and students' diversity and learning needs. Moreover, while most of the studies have been focusing on appropriate SCL teaching methods, there is still need for future study to focus on the effectiveness of each method in terms of its application of SCL in the classroom situation.

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CHALLENGES OF CHILDREN WITH DISABILITIES IN ACCESS TO EDUCATION: A Case of the Selected Primary Schools in Dar es Salaam, Tanzania

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ABSTRACT

Children living with disability are perceived as incapable, a misfortune, ill, dependent and a burden to the family, and cannot endure the stress of learning. Hence such children are denied the right to education. This paper explores challenges which children with disabilities face with respect to accessing the right to education in Tanzania. Specifically, the paper examines challenges in: Pre-school settings, primary school and attitude towards children with disabilities in the learning process. A cross-section research design was used to collect qualitative data in eight primary schools. The study on which the paper is based used different forms of qualitative inquiry including key informant interviews, focus group discussions, observation and life histories. It was found that violation of the right to education for the children with disabilities started at kindergarten going age, because there were no preschools for them. It was also found that primary schools had unfriendly learning environments -including shortages of transport, teachers, learning materials, physical facilities and sanitary services. It was also found that negative attitude towards children with disability from peers and teachers discouraged disabled children from attending school. It is suggested that the Ministry of Education, local government, Non-Governmental Organizations (NGOs) and religious institutions should ensure that all schools which enrol children with disabilities are available, affordable, acceptable and adaptable to improve disabled children's access to education. It is further recommended that the Ministry of Education and Vocational Training should recognize and establish a pre-school division incorporating screening units to identify children with disability needs.

Key words: Children with disabilities, right to education, Government primary schools

1.0 INTRODUCTION

A documentary on the Tanzania Independent Television (ITV) showed how children with disabilities in primary schools realise the right to education. In the documentary, there were three children with different disabilities - including a blind child, another one sitting in a wheel chair and yet another with no hands. They shared the same desk and book. The class teacher was seen saying: "Look, we are not discriminating children with disabilities; Government provides all learning materials for them. Children with disabilities open up the discussion as to how they are going to use one book with their different disabilities".

If the above documentary portrays a real situation in primary schools, then how do children with disabilities realise the right to education in inclusive schools? Every person has right to basic education¹⁷. Education has important roles to enable people to live with dignity, develop their full capacities, participate fully in development and improve the quality of their lives. However, children with disabilities (CWD) are not always considered to be part of humanity because many of them around the world are left out of the national education system due to their physical conditions (Hunt and Hunt, 2004). Globally, about 93 million of children under the age of 14 live with a moderate or severe disability and most of them are found in the developing countries of Africa, Asia, Latin America and the Middle East (UNESCO, 2017). It is estimated that one in every ten children is born with or acquires a physical, sensory, mental, intellectual or psychological disability due to preventable diseases, congenital causes, malnutrition, misconduct, deficiencies, accidents and injuries, armed conflict and landmines (WHO, 2011). On the other hand, many causes of disabilities are preventable and are results of poverty, inadequate access to health services, armed conflict, accidents or abuse and violence (Habibi, 2002). Literature reveals that one out of every 100 CWD does not attend any form of school in Africa and Asia (WHO, 2011). This suggests that approximately 98% of children with disabilities have no access to education, Tanzania inclusive (URT, 1990).

In Tanzania, the situation regarding access to education by children with disabilities is discouraging because the vast majority of children are excluded from the educational system (Karakoski and Ström, 2005). Tanzania is among 14 sub-Saharan African countries with the lowest of children education in primary schools (Karakoski and Ström, 2005; UNESCO, 2014). Unfortunately, CWD are among disadvantaged groups as 60% of school aged children are out of school (Opini and Onditi, 2016). There is a total of 16,109 government primary schools, which include 24 special and 233 units that are specially integrated into regular schools in Tanzania Mainland and 86 in Zanzibar (URT, 2011; BEST, 2016). In this way the number of children with disabilities enrolled at primary school level is low compared to able-bodied children. CWD are thus systematically excluded from equal rights to education at different levels of education as a result of their various handicaps (Makaramba, 1998; Lehtomäki *et al.*, 2014). Karakoski and Ström, (2005) and Opini and Condit, (2016) noted that CWD experience difficulty in gaining access to education in primary schools caused by few special schools and units, long distances from home to schools and units, inadequate transport infrastructure, lack of trained teachers (special education teachers) and shortage of learning materials suitable for children with disabilities.

¹⁷ Article 26 of Universal Declaration of Human Rights of 1948.

Nevertheless, Tanzania has taken several steps to support the right to education and reduce discrimination against CWD's access to education, including adoption of inclusive education settings by the Ministry of Education and Vocational Training (MoEVT) which requires that CWD, regardless of their gender, race and age should learn together with other children in regular schools. Further, government ensures Early Child Development (ECD) centres are established and strengthened in primary schools and orphanage centres as well as using local media to bring awareness to society about non-discriminatory practices against CWD (URT, 2009). Still, only 0.35% of all children enrolled in primary school are children with disabilities - which is less than 1% of the total enrolment of primary school children (UNICEF, 2011).

Several authors have written about inclusive education and right to education in Tanzania, including Kisanji (1995), Mawalla (2000), Macha (2002), Okkolin and Lehtomäki (2005), Possi (2006), Kisanji and Saanane, (2009), Kapinga (2014) and Opini and Onditi, (2016). All those studies failed to explore living experience of CWD in access to education in government primary schools in the study area. With respect to the ITV documentary on the CWD and right to education, little is known of how the children living with disability access education in the wake of inclusive education in the study area. The research on which this paper is based was, therefore, carried out to explore challenges of CWD in the preschool settings and primary school. As well as attitude towards children living with disability in the learning process in Dar es Salaam.

1.1 Theoretical Framework

The study was guided by Women's law perspective. Theories including Women's law, Grounded Actors and structure and human rights were used together to explore challenges of children with disabilities (CWD) in accessing education. This study was qualitative because investigation of reality in access to education, the lives women who had CWD was a starting point for data collection (Bentzon *et al.*, 1998).

1.1.1 Women's Law Theory

Women's law methodology is a cross disciplinary and pluralist which calls for a rather free use of the available materials where it can be found (Dahl, 1989). The women's law approach is a bottom-up method whereby the life experiences of women are taken as a starting point in understanding women's position on the ground and how children with disability access education. In this study women's law approach gives a chance to understand the lived experiences of women who had CWD. Mothers were targeted as a starting point of investigation because in most cases they share some experiences with their children with disabilities due to their role in taking care of CWD in the family through their life stories about causes of disability, types of discrimination children experience and challenge to educate CWD. Women were found at school premises when they were returning to school after long weekends. Others were found at school compounds waiting for their children to finish their lessons, while others were visited in their homes. Life stories were used as a tool for qualitative educational research (Thorburn and Marfo, 1997). Through the context of the life histories, challenges faced by the CWD in the learning process, at the family level as well as attitudes towards their disabilities and the discrimination were extracted. Furthermore, the approach allows use of open-ended interview to parents, CWD, teachers, education and non-governmental organization

officers.

1.1.2 Actors and structures theory

The Actors and structure theory assumes that actors and structures are both enabling and constraining factors in access to education (Bentzon, *et al*, 1998). The actors and structures theory was used to understand whether or not the particular structures and actors were appropriate for CWD in accessing education. In the study on which this paper is based, different actors who are the main participants in education were identified and interviewed, including CWD, teachers, parents, education officers and non-governmental organization officers. On the other hand, the structures identified were education structures, school buildings (classes, dormitories, toilets, desks and tables) and distances from schools to homes.

1.1.3 Human rights theory

This approach needs reviewing a wide range of human rights instruments in order to understand the construction of right to education and its implementation at the national level. The right to education of CWD was analysed from the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights (ICESCR), the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), the Convention on the Elimination Against all Forms of Discrimination in Education (CADE) of 1960, the Convention on the Right of Persons with Disabilities (CRPD) of 2006, the Convention on the Rights of the Child (CRC) of 1989, the African Charter on the Rights and Welfare of the Child (ACRWC) of 1990, and the Dakar Framework for Action of 2000. On the other hand, the following Tanzania laws were reviewed: the Constitution of 1977, Educational Act No.25 of 1978 as amended by Act No.10 of 1995 and Primary Education Development Programme Policy to establish whether or not Tanzania laws adhere to the international human rights standards.

It is worth noting that every child has the right to education, physical challenges notwithstanding, because primary education is compulsory for school age children¹⁸. The right to education reflects both liberal and socialist concepts of human rights. The liberal concept on the right to education focuses directly on the parents' responsibility to provide education to the children, and the government has a duty to make sure that every child receives adequate education by means of mandatory school attendance and the legal legislation of school and curricula. The socialist concept of human rights focuses on the primary obligation of the state to provide education (Nowak, 1995). All the international human rights recognise both liberal¹⁹ and socialist²⁰ thoughts of the right to education. On the other hand, the right to education is closely related to cultural and political rights; it is also related to other human rights such as enjoyment of many civil and cultural rights such as freedom of information, expression, assembly and association, the right to vote and to be elected and the right to have equal access to public services, depending on at least minimum level of education (Nowak, 1995). The right to education is not only a question of fundamental human rights, but is also a right that has utility value and is an indispensable means to realizing other human rights. Access to education has multiple

¹⁸ Article 26 of Universal Declaration of Human Rights

¹⁹ Article 13(3) of ICESCR, UDHR Article 26(2)

²⁰ Article 13(1), Article 10 of CEDAW, CRC Article 23(1), ACRWC Article 13(2), DRDP Article 2

effects on the lives of children with disabilities; hence it is imperative and should be maintained from the early development stages of life, in childhood²¹. Therefore, the right to education for children with disabilities becomes a legal issue and the government concerned is supposed to protect this right.

The constitution of the United Republic of Tanzania prohibits all forms of discrimination and recognizes human rights, including rights of children with disabilities. In this way, all children with disability have a right to education that cannot be breached by any organizations, parents or guardians²². In this way, the right to education for CWD is protected further by various statutes including the Education Act, Care and Maintenance of Disabled Persons Act of 1982 and government policies. The Universal Primary Education Programme of 1974 (UPE) policy emphasized on decreasing illiteracy by stressing on universal access to basic education. In this manner, it is compulsory for every child who has attained the age of seven years to be enrolled for primary education²³. The government has responsibilities to provide premises, teachers and curriculum at all levels of school and other institutions of learning. The law goes further and assigns responsibilities to the parents to make sure that children with disability attend regularly the school at which they are enrolled until they attain the level of education for which they are enrolled²⁴. This responsibility of educating goes together with another obligation of taking care of and providing maintenance for the disabled persons, according to their means by their relatives²⁵. Therefore, it is an offence for any person under any circumstances to cause a child with disability not to attend primary school regularly until the completion of primary education.

3.0 RESEARCH METHODOLOGY

3.1 Description of Study Area

Data were collected from three municipalities of Dar es Salaam region, Tanzania - namely Temeke, Kinondoni. The region was selected for the study because it is likely to have all kinds of schools which enrol and attract a wider range of information compared to other regions. Schools for children with disabilities in Dar es Salaam include two for the visually impaired, three units for the deaf, 13 for the mentally challenged, one for the physically handicapped, and two for the multi-handicapped.- which make a total of 21 schools (URT, 2004). Further, Dar es Salaam was selected for the study because it is among the regions selected in 1998 by the Ministry of Education and UNESCO for a pilot study on inclusive education.

3.2 Research Design and Sampling Procedure

The study adopted a cross-sectional research design in which data were collected only once. Bailey (1998) and Kothari (2004) contend that a cross-section design responds positively to time and financial constraints. A sample size of 88 respondents was large

²¹ Article 13(2)(a) of ICESCR

²² Constitution of 197, Part II, Article 11 (2) which states that: 'Every person has the right to education and pursue education in a field of his choice to the highest level according to his merits and ability.'

²³ Section 35(1) of the National Education Act, No. 25 of 1978

²⁴ Section 35(3) of the National Education Act, No. 25 of 1978

²⁵ Section 12 and 14(1) and 14(2) of Disabled Persons (Care and Maintenance) Act No. 3 of 1982

enough for meaningful statistical analysis. Bailey (1998) recommends that regardless of the population size, the minimum sub-sample size of 30 cases for a research is enough for statistical analysis. Purposive sampling was used to select primary schools, including Salvation Army, Mtoni Maalum, Temeke, Kibasila, Uhuru Mchanganyiko, and Buguruni school for the deaf, Msewe, and Msasani primary schools, basing on type of children with disabilities enrolled and availability of other facilities. Further, description of the selected schools is as follows: two schools were special for children with physical disability, three were boarding schools, four were day schools and one was a partial boarding school where parents left their children at the school on Mondays and collected them from there on Fridays. The number of schools overlaps as some of them had more than one unit (Table 1). Similarly, purposive sampling was used to select key informants from seven non-governmental organizations dealing with education issues. The study employed random sampling technique to select pupils from each primary school from class attendance lists based on their capacity to express themselves.

Table 1: Selected Primary schools and kind of CWD enrolled

No	Name of primary school	Type of disability enrolled	Status	Municipal Council
1	Salvation Army	Physically handicapped	Special school	Temeke
2	Mtoni Maalum	Mentally challenged	Special school	Temeke
3	Temeke	Deaf unit	Inclusive	Temeke
4	Kibasila	Low vision(iterant)	Inclusive	Temeke
5	Uhuru Mchanganyiko	Blind and mentally	Inclusive	Ilala
6	Buguruni Deaf	Deaf unit	Special school	Ilala
7	Msewe	Mentally challenged	Inclusive	Kinondoni
8	Msasani	Deaf unit	Inclusive	Kinondoni

3.3 Data Collection

The study used mainly qualitative research approach with some elements of quantitative research whereby both primary and secondary data were collected. The qualitative data were collected through a field survey whereby semi-structured and unstructured interviews were held. Semi-structured interviews were administered to parents and key informants, while unstructured interviews were used for children with disabilities in order to understand the challenges they face in accessing education. No predetermined set of questions were used under these circumstances. The method took a great deal of time to get systematic information from them. Key informants were interviewed based on their understanding and knowledge about CWD and access to education (Table 2). Key informants were from seven NGOs dealing with education, namely Disability Information Centre, TUPA, CHAWATA, Tanzania Education Network, Tanzania Deaf Association (CHAVITA), DOLASED and Albino Association. Moreover, 21 teachers, 2 matrons, 2 Education officers, and 15 parents were key informants. A total of four (4) Focus Group Discussions (FGDs) were held, two of them with children who had physical disabilities at the Salvation Army school, one with teachers at Uhuru Mchanganyiko Primary School and another one with parents at Mtoni Maalum. Each FGD had six participants. Secondary data were collected from published and unpublished documents, including Human rights instruments, Laws, education policy and education reports based on children and right to education. Consequently, passive and active observations were carried out in all schools to examine whether the physical

structure, environment, curricula and extra-curricular activities, teaching strategy and learning processes were disabled-friendly. Through observation methods, information was triangulated from key informants and real school structures.

Table 2: Distribution of respondents (n = 88)

Respondents	Temeke		Kinondoni		Ilala	
	Men	Women	Men	Women	Men	Women
Education officers	-	4	-	1	1	-
Pupil	6	5	5	4	8	8
Parents	1	8	1	2	1	2
NGOs	1	1	1	2	2	-
Teachers	6	9	1	1	1	3
Matrons	-	1	-	-	1	-
Total (88)	14	29	8	10	14	13

Gender distribution of respondents –Women 52 and Men 36

3.4 Data Analysis

Qualitative data collected through FGDs, observation, life stories and key informant interviews were analysed through content analysis. The information was summarized in themes and sub-themes to reflect specific objectives of the study.

4.0 FINDINGS AND DISCUSSION

4.1 Situation of Children with Disability

According to the Ministry of Education and Vocational Training (MoEVT), access to education by children with disabilities (CWD) is through three main channels, namely inclusive education, special schools and integrated schools. Dar es Salaam Region has a total of 370 government primary schools of which 21 schools enrol CWD. CWD follow the official (regular) curriculum except for mentally challenged children and children with speech impairment who were attending *Mtoni Maalum*, *Uhuru* and *Buguruni* schools. The education structures were 1:2:1:2:1:2:1= 10 years. This means that they remain in one class for two years.

Prevalence of childhood disabilities refers to the proportion of children in the community who are disabled at a given time (Thorburn and Marfo, 1994). The study revealed further that the accuracy of any data on disability was questionable. This is due to the fact that data of CWD are based on national population figures of Tanzania. According to national population and housing census of 2012, Tanzania had 19, 725, 456 children aged between 0 to 14 years. On the other hand, relying on the WHO formula which says that disabled persons make up 10% in each population; this would imply that Tanzania had 1, 972, 546 children with disabilities from 0 to 14 years (URT, 2013), while according to the 2012 population and housing census, Tanzania had only 551, 260 children with disabilities from the ages of 0 to 14 years (URT, 2014). This finding is in line with what Camerron et al. (2005) found - that the lack of a comprehensive national database has also led to major gaps in information regarding the incidence of disability, rehabilitation and education services in Tanzania. This indicates that the statistics from the Tanzania census differ

substantially with WHO's formula. The use of such data can have detrimental effects on planning. Hence, the magnitude and prevalence of disabilities were not established by service providers (MoEVT) due to unreliable sources of data.

The living experiences of CWD in accessing education were examined at family level. The findings revealed that women had the role of taking care for children with disabilities in the families. In this way, women were the ones who had responsibilities to search for school and make sure that children go to and return from school. As a result of this role, women were forced to abandon their jobs or, for that matter, any economic activities to take care of their children and in so doing they were adversely affected economically, which in turn increased their domestic work load and economic dependency on their spouses.

4.2 Challenges of Children with Disabilities (CWD) in Accessing Right to Education

Challenges experiences by CWD are divided into the following categories.

4.2.1 Preschool settings

1. Shortage of preschools

The finding showed that violation of the right to education for CWD starts when they are required to join kindergarten. In all three municipalities there were no preschools for children living with disabilities. This situation resulted in denying CWD the right to education due to the fact that pre-school education is not part of the general education in Tanzania, thus preschools were not established (Education and Training Policy, 1995). This implies that CWD were enrolled at primary school level rather than in preschool settings. This further means that they had to stay in primary school for longer periods to cover what they were supposed to learn in pre-school.

2. Shortage of Screening Centres

The findings in Table 3 show that the three municipalities of Dar es Salaam City had four screening centres, three in Temeke Municipality and one in Ilala Municipality to serve 4 364 541 population (URT, 2013). This indicates that there were shortages of screening and assessment centres within the city. The findings show that parents and their children were required to move from one school to another to find an appropriate screening centre and school according to their children's disabilities. It further implies that women who had the duty of taking care for disabled children did not have enough information about availability of screening centres and appropriate schools for their children. In fact, available centres help to give statements which describe the special needs, special provision required and the names of schools that would meet those needs. In some cases children are enrolled without being screened or assessed to know the magnitudes of their problems and to identify the needs that ought to be met in support of their education. One key informant said that:

The availability of the screening canters will assist early identification of disabilities to the children and increase access to health and education services. Most of examinations are done by non-medical staff (teachers).

This indicates that there was no defined way to identify needs of children with disabilities. This argument was supported by a parent in an FGD who agreed that:

I live at Kawe in Kinondoni Municipality. My son has low vision challenge. I registered the boy at the nearby primary school after he reached school-going age. I reported his case to the class teachers so he could be given a chance to sit in front of the class. A few days later a teacher wrote a letter to me complaining that my son did not understand anything in the class and a few weeks later the teacher expelled him from school, informing me that the school was not appropriate for my son. Therefore, he advised me to look for an appropriate school. In due course I decided to enrol the boy at a nursery school while I was looking for another school. I visited the Salvation Army and Mtoni Maalum primary schools but they refused to take the child maintaining that the schools were for pupils with physical disabilities and mentally challenges pupils respectively. However, Mtoni Maalum examined the child's problem and advised to enrol him at Kibasila Primary School.

The findings are supported by Opini and Onditi, (2016) who reported that some children with disabilities (16%) were refused entry or registration, particularly into “regular” schools with children who were not disabled, because of their disability. This implies that parents lack proper information about availability of screening centres. As a result, numbers of pupils with disabilities enrolled in primary schools decrease.

Consequently, the observation also shows that during data collection, Mtoni Maalum, a special school for mentally challenged children was the only active assessment centre. Unfortunately, assessments were conducted by regular teachers who had gained special education skills at Patandi Teaching College, Arusha, Tanzania. During FGD, one parent discussant argued as follows: Parents come from different regions in Tanzania to access screening services at Mtoni Assessment Centre. This finding is in line with Vernon (1998) who points out that government failure to take account of specific needs of CWD constitutes an oppressed and discriminated group in a society. This further implies that examinations performance of CWD was poor because they were denied their special needs in education which influences failure to compete with other children.

Table 3. Screen and Assessment Centres

No	Kind of disability	Assessment centres	Enrolled school at	Municipality
1	Deaf	Buguruni Primary school	Buguruni Temeke Msasani	Ilala Temeke Kinondoni
2	Visual impairment	Kibasila	Uhuru Mchanganyiko Kibasila	Ilala Temeke
3	Intellectual disability	Mtoni Maalum	Mtoni maalum Wailes Msasani Msewe	Temeke Temeke Kinondoni Ilala
4	Physical challenge	Salvation Army	Salvation Army	Temeke

3. Overcrowded and waiting list to join primary education

The findings in Table 4 show that all the seven schools where data were collected for this paper were overcrowded. This implies that the capacity of classes did not meet the real demand of children who were required to start schooling. For example Salvation Army primary class had capacity to accommodate 30 pupils. The findings in Table 3 show that the class room had capacity to accommodate 30 pupils, but the number of children screened and listed in waiting was 1470. This indicates that there was a problem of waiting list to join primary school whereby a CWD was required to wait for another academic year to join the school. This further implies that some of those CWD screened in 2006 would get opportunities to join primary school after 49 years (in the year 2055). In practice, some CWD were denied the right to get education in appropriate time, which is contrary to the intention of Art 24(1) of CRPD which calls for states' parties to end discrimination against persons with disabilities in the education sector so that they can realize this right.

Table 4: Waiting list and overcrowding in primary school

Name of school	Kind of disability	Class capacity	Total CWD	Screened Children	Children in Waiting list
1. Salvation Army	Physical handicapped	30	180	1500	1470
2. Mtoni Maalum	Intellectual	5	6	-	30
3. Buguruni	Deaf	10	240	74	54
4. Msewe		5	37	-	-
5. Msasani		14	42		14
6. Uhuru Mchanganyiko	intellectual	24	95	-	-
7. Uhuru Mchanganyiko	Vision	50	68	-	-

4.3 Challenges after Enrolment at Primary School

1. Distance and transport problem

The findings showed that despite Dar es Salaam having 21 schools these are not located within safe reach of the children, hence transport and distance problems emerged. Those problems were experienced by both day and boarding scholars. Boarding scholars were required to travel from villages to school and after midterm break, they were also required to return back to their villages. The distance problem discourages parents from taking their children back to school. On the other hand, the day scholars were required to travel long distances daily by public transport to attend classes. Observation showed that access to transport is a common problem in Dar es Salaam. This implies that CWD lack the capacity to talk or compete for transport with able-bodied persons. As a result, some conductors leave them at the bus stops. This further implies that CWD are discouraged from attending school and in the end some of them decide to leave school.

This further connotes that there were shortages of specialized schools for certain kinds of

disabilities in Dar es Salaam, for example a Salvation Army school is the only one available for physically handicapped children in the Coastal zone, which includes Dar es Salaam, Morogoro and Bagamoyo. The school register indicated that other pupils were coming from Dodoma, Tanga, Sumbawanga, Arusha Iringa, Kibaha and Kilwa. This situation was similar to that of Buguruni Deaf Primary School, Kibasila Itinerant Centre, Uhuru Mchanganyiko and Mtoni Maalum. This problem denied children with disabilities the right to education as it discouraged children from attending classes on time and finally they dropped out of school.

2. Shortage of teachers, learning materials and facilities

The findings in Table 5 show that the official pupils to teacher ratio in seven primary schools -Msewe, Mtoni Maalum, Buguruni, Salvation Army, Temeke, Buguruni and Kibasila Primary Schools – met the standard over and above.. This implies that schools had shortage of professional teachers and required long working hours which increased burden to educate children. This finding is similar to what Thomson (2017) who found that inclusive education is rarely covered in teacher training; so teachers lack the skills to cope with educating children with disabilities. This implies that there is inadequate number of special teachers to teach sign language; there is also a shortage of hearing aids as was the case at Buguruni Primary School. Teachers used a mixture of partial sign language in describing a thing by its appearance, for example, short or tall as a means of communicating.

The findings from integrated and special schools such as Uhuru Mchanganyiko, Buguruni and Kibasila also showed that schools had unfriendly learning environments. They lacked pavement and rails, something that hindered free movement of blind children to access either cafeteria, classes, dormitories or toilets. During an FGD at Uhuru Mchanganyiko, discussants cited the following words by a disabled pupil:

"I am the only pupil who has this white stick in this school. The school grounds have many trees and lack pavements. This remains a main obstacle to access buildings such as classrooms, dormitories and toilets without assistance from non-blind pupils. The situation is worse for new-comer children who are not familiar with the school environment as they hit themselves against the trees every day"

It was observed during an FGD that children with vision impairment were required to sit down so as to identify the path to the dining hall. This finding is similar to what Tunganaza and Mboya (2005) reported that CWD experience poor access to classrooms, libraries, bathrooms and student dormitories. This implies that adequate presence of such infrastructure to support CWD to access class rooms lowers children's morale to access education.

It was further observed that all schools visited lacked recreation grounds where the children could play. It is advised that children with disabilities need to participate in different kinds of sports as part of physical exercise and brain rehabilitation.

Table 5. Shortage of teachers and learning materials

School	Professional (Teachers)	Teacher – student ratio	Current ratio	Shortage of learning materials
Salvation Army	1	1:5	1:10	Teaching materials for teachers
Mtoni			1:8	
Maalum	7	1:5		Books, toys, classrooms and teachers.
Temeke	4	1:5	1:10	Hearing aids, books and classrooms
Kibasila			1:7	
Low vision	2	1:1		Learning materials and magnifying lenses
Uhuru				
Mchanganyiko	7	1:5	1:14	
Uhuru				Braille machines, manila papers, braille
Mental			1:7	books, Perkins typewriters, white sticks,
challenge	13	1:10		pavement and toys.
Buguruni			1:15	Hearing aids, teachers, tables, chairs and
Deaf	5	1:2		books.
Msewe	1	1:5	1:37	Teachers, desks, chairs and toys.
			1:14	Desks, chairs, hearing aids, pavement and
Msasani	4	1:10		teachers.

It was further found that all schools had shortage of books with the exception of Salvation Army primary school for physically handicapped children, where able-bodied and disabled children used normal books, and the ratio of the books to pupils was 1:2. Despite the shortage, government - which is responsible for provision of special needs like books -, allocates only TZS 25,000 (\$10) per student annually for able-bodied and disabled children alike; , this is not enough to spend on the special needs. One key informant with vision impairment at Uhuru Mchanganyiko Primary School revealed that:

“In our school there is no student who has a Braille machine. It is not easy for every student to possess instruments like Perkins or Braille machines because they are expensive. In such a situation, there is no reason to send a child to school while there are no learning materials for us because what is a child living with vision impairment going to do at school?”

This finding contradicts Article 24(3) (a) of the Convention on the Rights of Persons with Disabilities (UNCRPD) which requires the Tanzania government to provide learning facilities such as Braille, alternative script, augmentative and alternative modes, means and formats to allow equality in accessing education. This finding is also in line with Mmbaga (2002); Lehtomäki *et al.*, (2014) who found that lack of appropriate teaching equipment, materials and inadequate teachers' training limited opportunities for learning among children with disability and significantly increased the risk for pupils with visual impairments to drop out of school. Mushi and Penny *et al.* (2003) recommend that realisation of the right to education is directly linked to material inputs such as textbooks, teachers' quality, availability of libraries and laboratories with equipment and basic facilities. This implies that, without provision of those facilities and equipment, the performance and academic achievement of the CWD must be affected because that

problem constrains effective teaching of pupils. As a result, pupils are discouraged to attend school and finally drop out of school.

The findings further revealed that Tanzania has only one facility for preparing Braille materials, located at Uhuru Mchanganyiko Primary School. The fact is that this industry does not have the capacity to produce enough books for primary pupils and to accommodate other users of Braille print materials; hence there is shortage of these kinds of books.

One key informant further added that:

‘There is confusion in teaching due to the different actors involved in the publication and distribution of books; as a result they create confusion because every producer has their own approaches in writing these books’.

This finding is supported by Grönlund *et al.* (2010) who argue that children with disabilities are currently integrated rather than included in mainstream education, as while children with disabilities attend ordinary classes, their special needs are not always catered for. This implies that CWD lack opportunity to access education in the same way as able-bodied children.

3 Shortage of sanitary services

The findings indicated that shortage of sanitary facilities prevailed in six primary schools (with exception of special schools like Salvation Army and Mtoni Maalum). Sanitary facilities for CWD were taken into consideration including bathrooms and toilets that were well constructed and easily accessible by the children. Unfortunately, the situation was contrary in inclusive schools like Uhuru Mchanganyiko, Kibasila and Wailesi where it was found that the toilet to student ratio was 1:40 for both sexes. This implies that inadequate numbers of toilet holes denied CWD to learn comfortably without being discriminated by their fellow pupils after failing to access toilet services. This was contrary to the directive by the Ministry of Education and Vocation Training that the toilet to pupil ratio should be 1:25 for girls and 1:20 for boys (URT, 2009).

4.4 Attitude towards Children with Disability (CWD)

1. Prejudicial language

Education of CWD is affected by the community's prejudice against people with disabilities (Opini and Onditi, 2016). Community perceived disabled children as helplessness, submissiveness, dependency and discomfort in the presence of non-disabled people (Asch and Sacks, 1983; Hammer, 2012). The findings revealed that children with disability experienced yellowing and prejudicial language on their way to school or on their way back home which discouraged them to attend schools. The findings further showed that prejudice and stereotyping languages were often expressed in verbal harassment, offensive and labels terms including *zuzu*, *kalulu*, *taahira* and *chizi maarifa*. All these terms were used to refer to mentally challenged children (insane) while the word *kipofu* was used to connote a blind child.

In the same way, that words such as *Zungu pori* or *Zeruzeru* were used for albino to compare them with an evil spirit living in the bush. This finding is in line with an argument

by Opini and Onditi, (2016) that many people tend to associate a disability with a curse, evil spirits, or witchcraft. This indicates that the community believes once an albino passes close to people they will suffer misfortunes in their lifetime or contract a deadly disease because they meet with a 'devil person' (albino). This affected child who were albinos in the learning process as some children ran away or cried after seeing an albino child, believing that they have met the devil. This further implies that CWD are discouraged from attending lessons and they drop out of school, and are thus denied their right to education.

On the other hand, words - including *madoido*, *kikono* (short hand) or *kigulu* (short leg) - were used to refer to physically challenged children. The community used such words intentionally to abuse CWD, a thing that excluded them from the education system. Consequently, the term "*kipofu*" (in Swahili word *kipofu* is singular and *vipofu* is plural) means blind person. However, there is controversy on the interpretation about who's is blind. The blind argue that these words signify negative attitudes towards them. The word *kipofu* begins with the morpheme "*ki*" in singular and "*vi*" in plural, and this morpheme represents non-living things and is chosen due to negative attitude. This implies that language is critical in shaping and reflecting community thoughts, beliefs, feelings and concepts as some words by their very nature degrade and dismiss people with disabilities. This finding is in line with the Disability Etiquette tips of 2006 which shows that the language customarily used to denote conditions of disability is often condemnatory, judgmental or couched in media jargon, which show some sort of exclusion not only in the community but also in access to education. One key informant who was blind said that:

"They believe that these words are purposively coined to indicate the social stigma towards the blind persons"

During an FGD with parents it was revealed that:

"The prejudice language from society affects parents in such a way that in every development step they take, the child with disabilities is the last person to be considered in the family. I know some parents pay high school fees for able-bodied children in English medium schools but not for disabled children".

This also connotes that the nicknames have such impact on children with disabilities that they cannot endure the stress of learning or, for that matter, of going to school. On the other hand, some fathers run away from their family and leave the duty to take care of CWD to the mother. This implies that mothers found themselves plunged into poverty as they lack time to engage in other economic activities. Similar results were also reported by Macha (2002) that there is an interrelationship between disability and poverty and that most parents make their choices as influenced by conditions of poverty.

2. Teachers' attitude towards children living with disability

The findings in inclusive schools showed that CWD are trained by non-professional teachers due to the shortage of special education teachers. The finding indicated that some teachers were not sensitized, nor did they have special education skills; hence they felt that CWD belonged to special schools and not to the normal classes. This finding is similar to those by Tugaraza and Mkumbo (2008); Jelas (2010) who found that the teacher education training curriculum has failed to change pre-service attitude and orientation

toward pupils with diverse needs, and most teachers feel unprepared to address inclusive education. This suggests that teachers treat CWD unfairly due to their challenge as slow learners in the classroom. The findings also show that some schools expel pupils from studies due to negative attitude that they are slow learners without giving parents an option as to what to do with their disabled children who have right to education. This implies that teachers' negative attitude is also accelerated by non-consideration of their basic needs. This finding is in line with Mkumbo, (2008) who found that the majority of teachers were of the attitude that inclusive education causes more problems in teaching than it solves and that it creates too much additional work for teachers.

4.4 Policies and Laws to Protect the Right to Education for Disabled Children

In 1977 Tanzania introduced Universal Primary Education (UPE) policies which were aimed at increasing enrolment levels and making education accessible by all children. UPE ensured that 80% of school age children were to be enrolled in primary schools (Thornburn, 2003; Opini and Onditi, (2016). The Ministry of Education prepared a programme that entailed using standard 7 teachers to teach to teach primary school pupils in lower classes. By 1978 the programme was going well beyond expectations, with classrooms meant for 45 children serving 80 pupils while other pupils were learning under trees (Musendo, 2005), but only 1% of children with disabilities had access to basic education in Tanzania (Mkumbo, 2008).

One key informant from the Ministry of Education revealed that:

“The schools were faced with acute shortages of class rooms, qualified teachers, textbooks, chairs, desks, stationery and sanitary facilities. The dropout rate for disabled children was high due to the parents' inability to pay school fees, poverty in the family, fear of being beaten, forced labour, teachers' absenteeism and boredom.

This implies that many children with disabilities such as sensory and physical impairments, development delay, learning disorders, and emotional disturbances were enrolled in regular classrooms. This also implies that no special arrangements were made to help these children to cope with school learning hence classrooms and the school environments were unfriendly to them. A similar observation was made by Musendo, (2005) who reported that there was no Universal Primary Education, but rather, there was universalization of illiteracy in Tanzania as part of disabled children being hardly considered. Thornburn (2003) contends that only a few disabled children have managed to secure a place in school and those few are not getting appropriate education due to limited resources. This was contrary to Article 11 (3) of the African Charter on the Rights and Welfare of the Child which underscores the point that the right to education needs to be accessed without discrimination so as to be enjoyed by every person in order to achieve the full realization of this right which should provide free and compulsory education.

The right to education is enshrined under Article 11(2) of the 1977 Constitution of Tanzania. The right to education is placed under Part II of Chapter I and is separated from the other rights which are placed under part III on the Basic Rights and Duties, named Bill of Rights. This means that the position of the right to education placed in the

Tanzanian Constitution is not regarded as a human rights issue because it is not part of the bill of rights. This further implies that the right to education is an enforceable right as Article 11 appears not to impose responsibility upon the legislature and government to make effective provisions for the realization of the right to education to children with disability. This further implies that realization of the right to education for children with disabilities depends mainly on the economic capacity of family, and most families are poor. In that sense the Government has waived its obligation to recognize education as a basic right as agreed in the international human rights instruments. This finding is in line with Mboya and Possi (1996) who argue that despite Tanzania recognizing primary education as a human right and every child has the right to education, little is done to increase educational opportunities for children with disabilities in primary schools.

5.0 CONCLUSIONS AND RECOMMENDATIONS

From the findings, it is concluded that the recent inclusion of education programme has not proportionately helped CDW realize the right to education on equal terms with able-bodied children because violation of the right to education start right from the time CWD are required to join pre-schools Whereas such schools do not exist. It is recommended that the formal educational system in Tanzania should recognize and encompass preschool education that incorporates early screening to identify children with disability needs.

It is also concluded that in primary school settings CWD experience inadequate presence of screening centres, unfriendly environments that discourage them in the learning process as many primary schools are inaccessible to them; shortage of special teachers, learning, teaching materials - including Braille machines, Braille books and Perkins typewriters, and long waiting list to join primary education. It is recommended that the Ministry of Education and Vocational Training in collaboration with religious institutions, and NGOs should take into consideration the challenges faced by CWD and respond to them by preparing reliable screen centres to identify and assess CWD in early stages of their life as well as supporting them with respect to special needs in education so as to make sure that all schools enrolling CWD are affordable, acceptable and adaptable.

It is further concluded that children are discouraged in the learning process due to negative attitudes such as prejudicial language from teaches and communities. It is also recommended that government, NGOs, teachers and parents should put more emphasis on addressing negative attitude towards CWD by using media - including magazines, radio and social media - to ensure all pupils are not discriminated in the learning process.

It is also concluded that all policies - including UPE, PEDP, Children Policies, Education and Training, Disabled Policy - lack a clear statement regarding the education needs of children with disabilities, hence lack positive approaches towards implementation of the right to education to the CDW. It is further suggested that Policy makers should develop appropriate and sustainable policies on teaching and learning, including making special education as a compulsory subject to overcome the problem of shortage of teachers.

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HUMAN RIGHTS INSTRUMENTS

- African Charter on the Rights and Welfare of the Child of 1990 (ACRWC)
- Convention on the Elimination Against all Forms of Discrimination in Education (CADE) of 1960,
- Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)
- Convention on the Right of Persons with Disabled (CRPD) of 2006,
- Convention on the Rights on the Child (CRC) of 1989,
- Educational Act No.25 of 1978 as amended by No.10 of 1995
- International Covenant on Economic, Social and Cultural Rights (ICESCR),
- National Education Act, No 25 of 1978 Primary Education Development Programme Policy of 1995
- The Dakar Framework for Action of 2000.
- Universal Declaration of Human Rights of 1948 (UDHR)